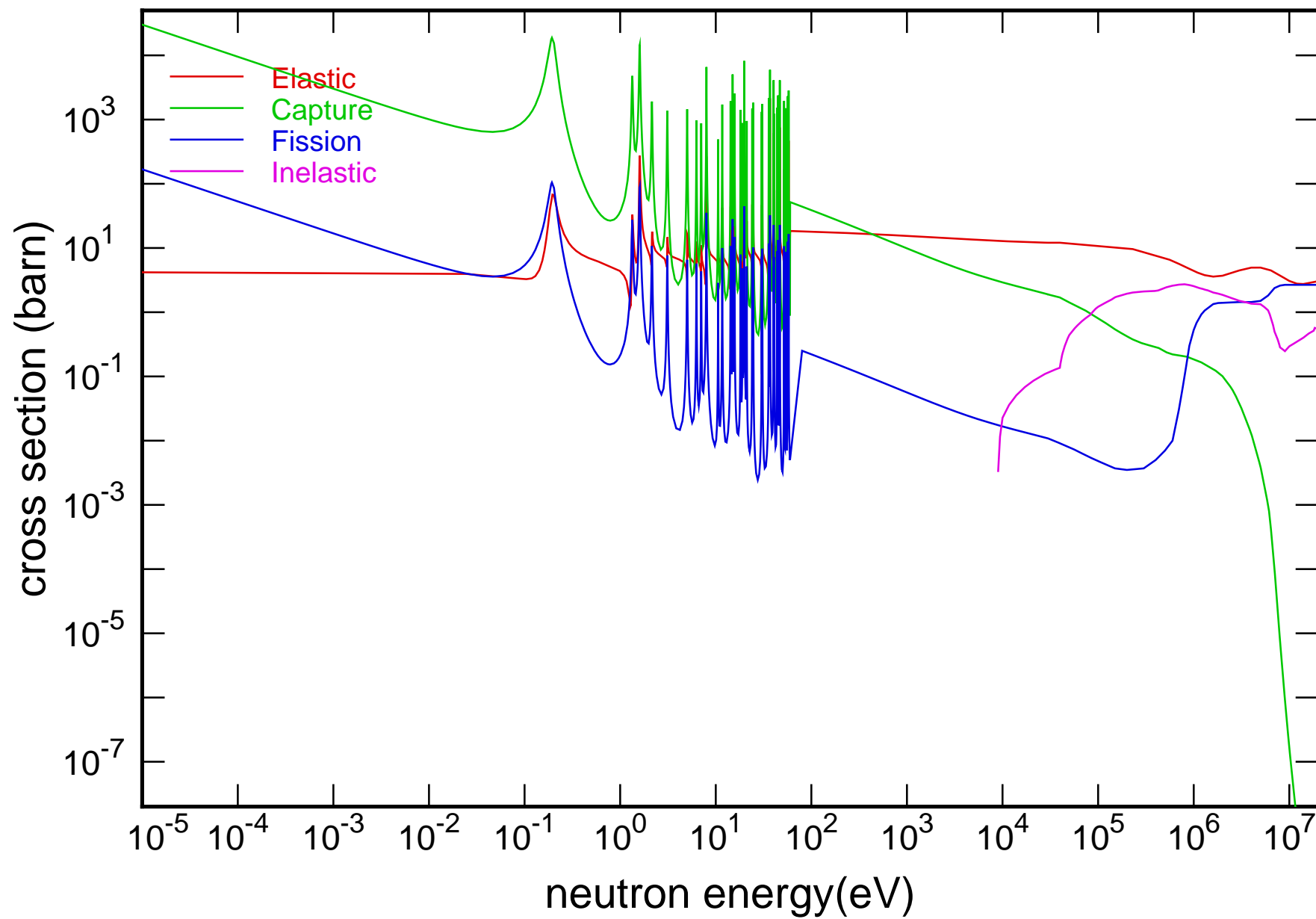Main Cross Sections

Cross Section

neutron energy(eV)

cross section (barn)

Cross Section

Cross Section

cross section (barn)

neutron energy(eV)

n__n_12
n__n_13
n__n_14
n__n_15
n__n_16
n__n_17
n__n_18
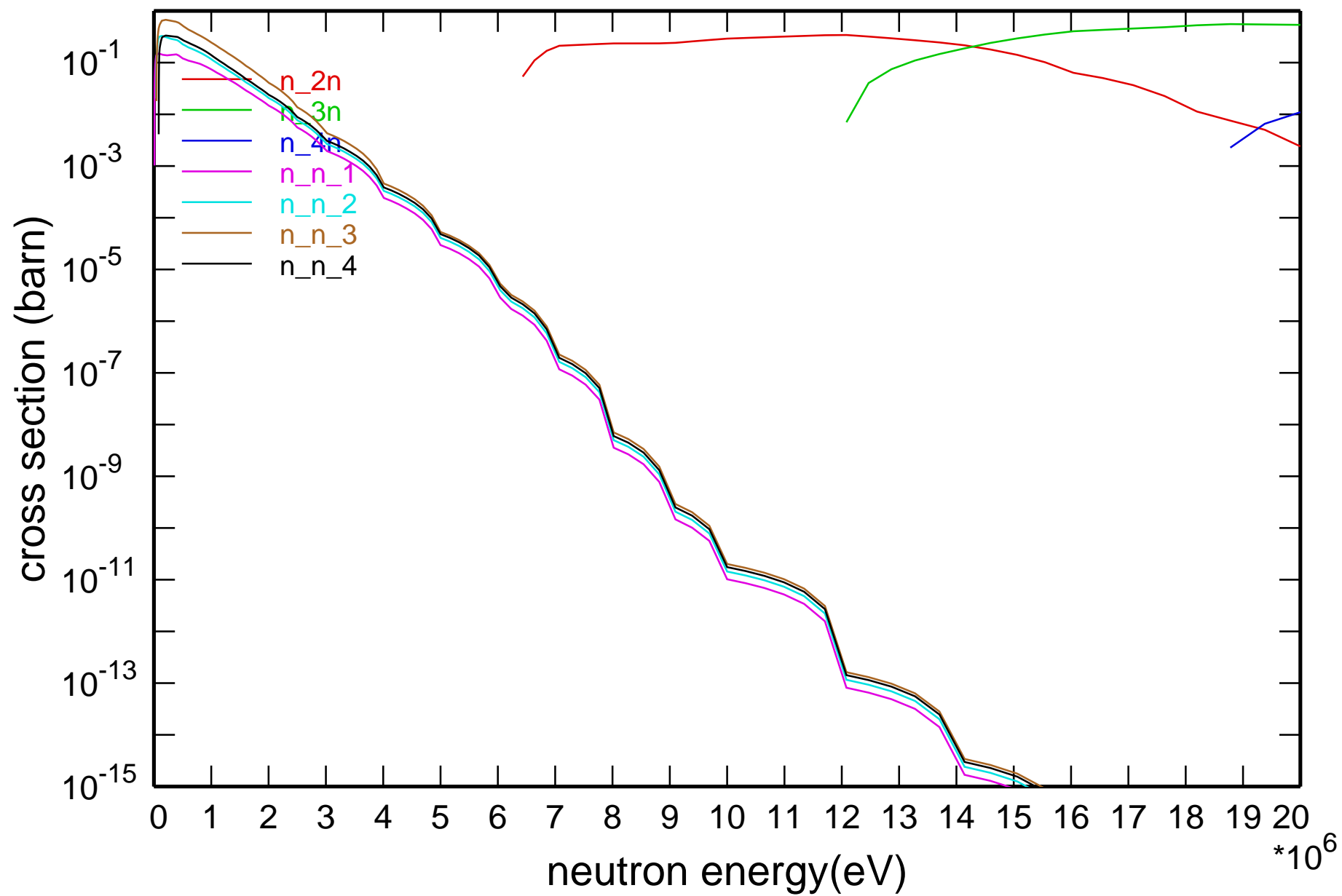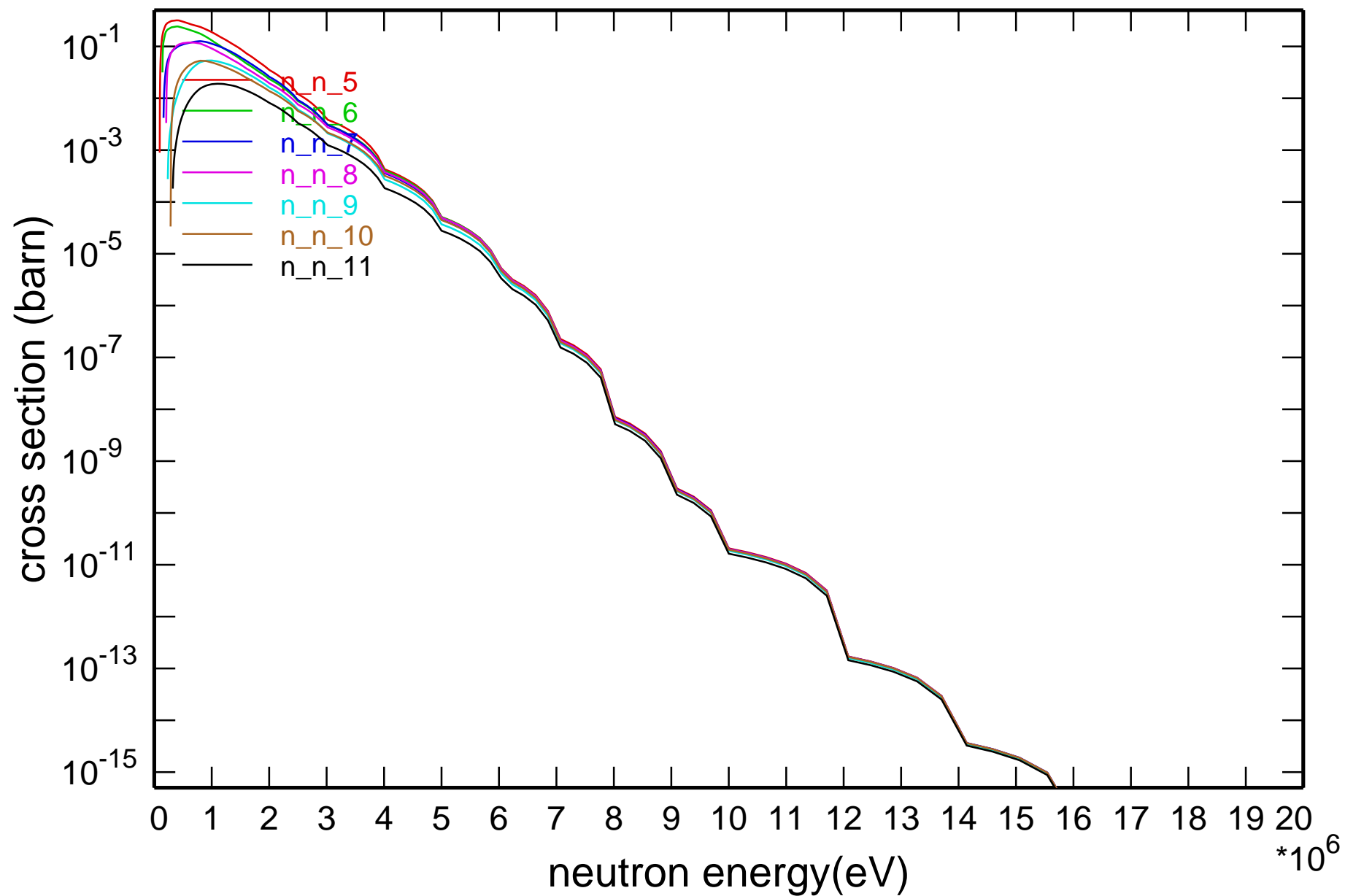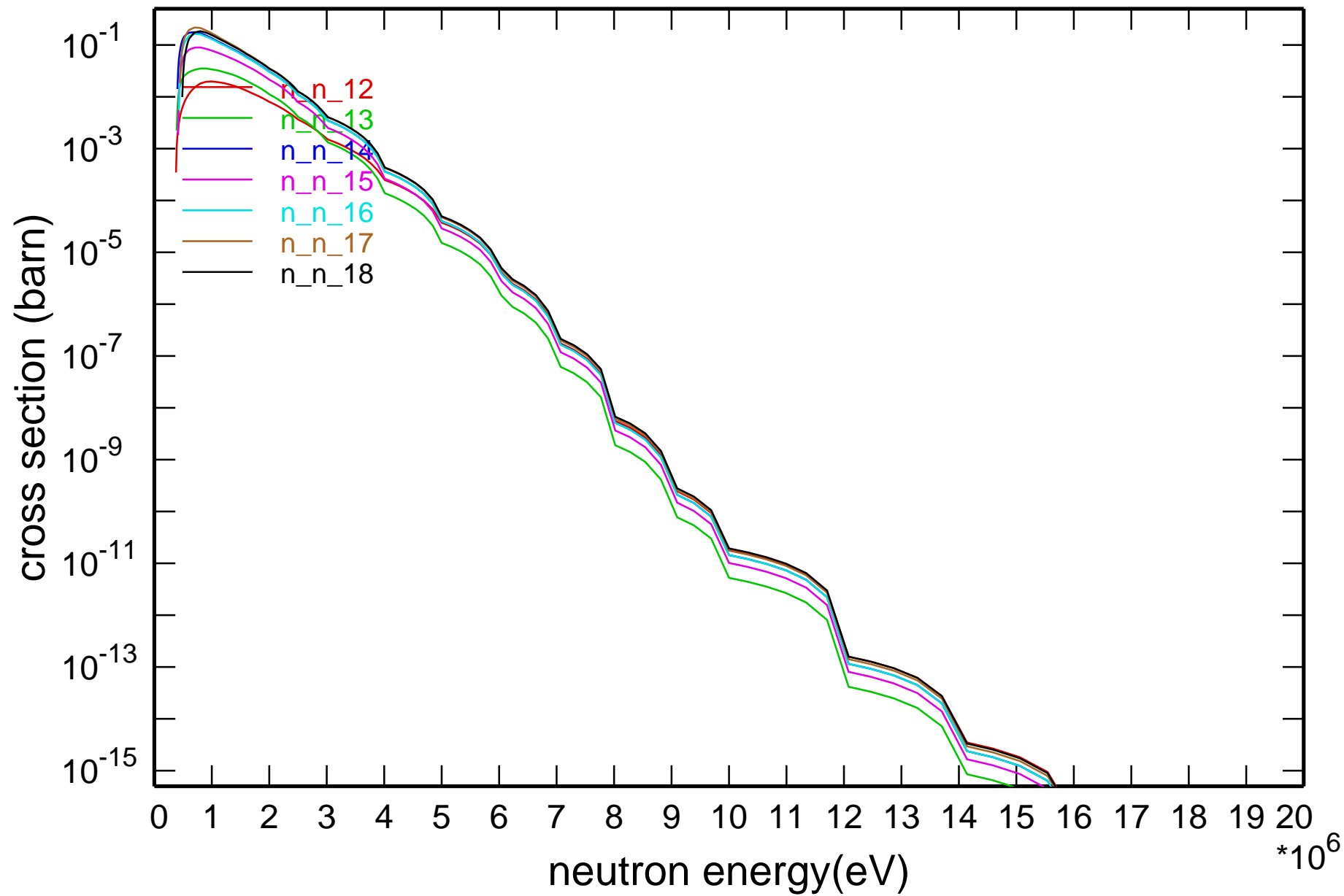
Cross Section
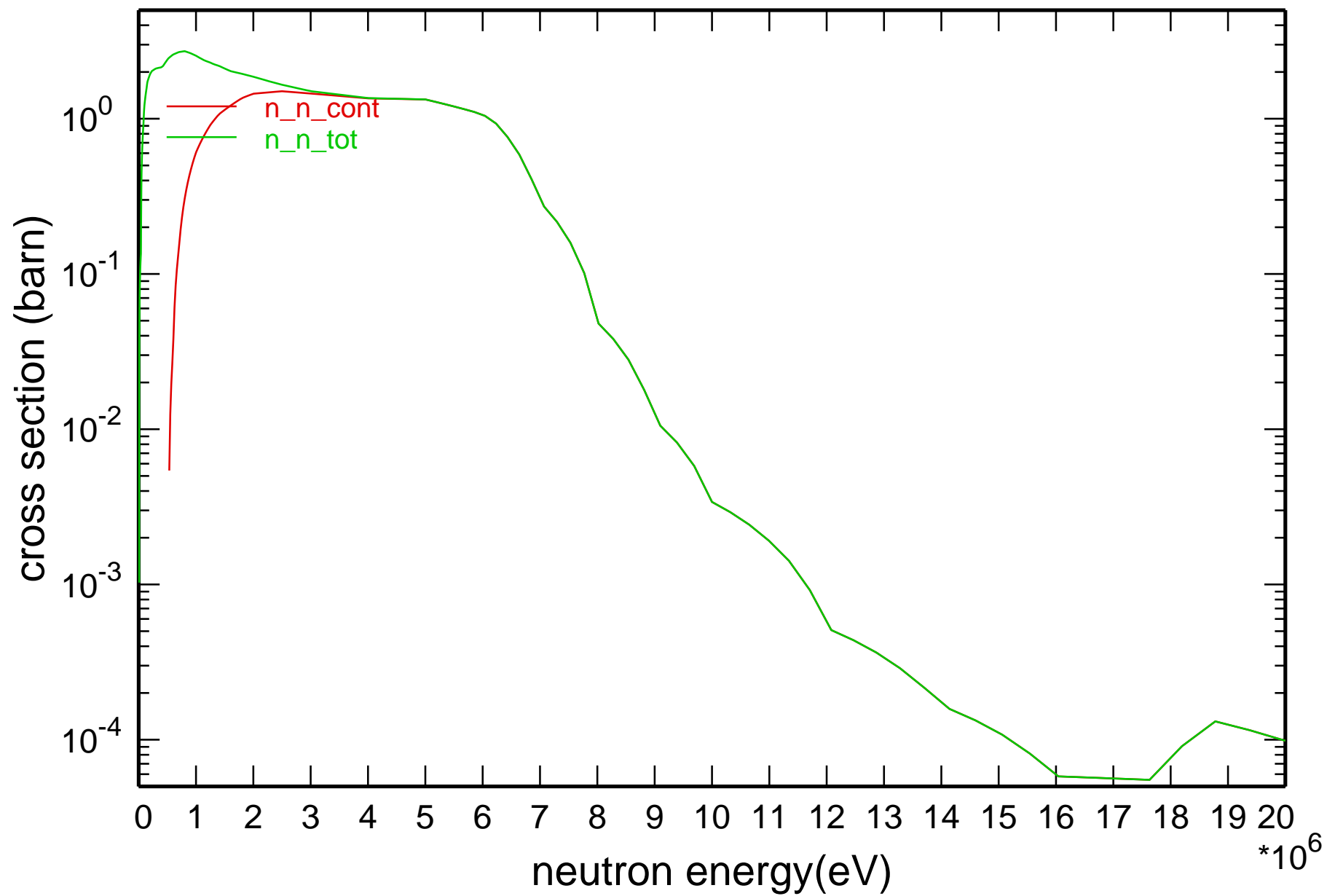
neutron multiplicity for fission
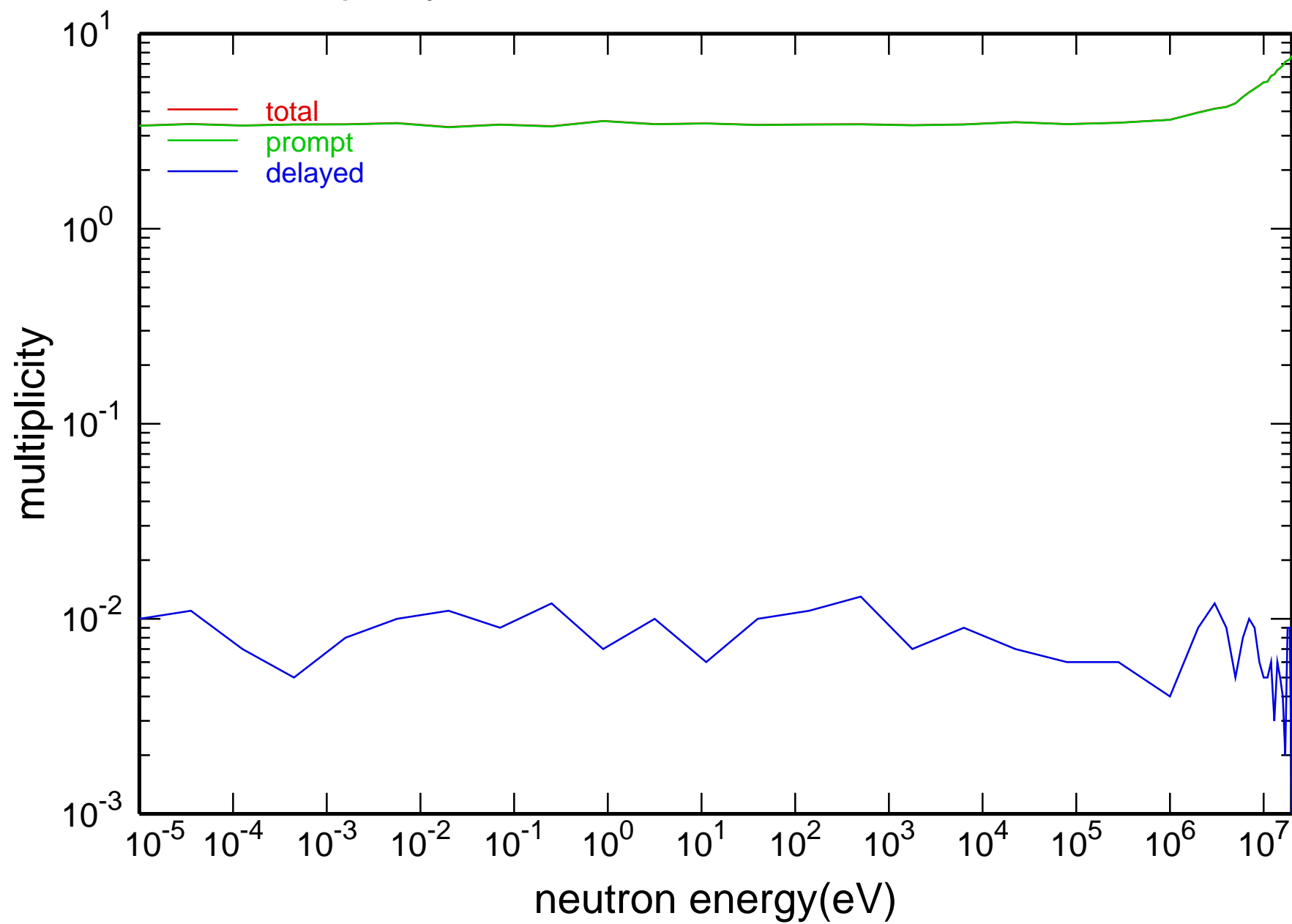
Angular distribution (CMS)
Elastic
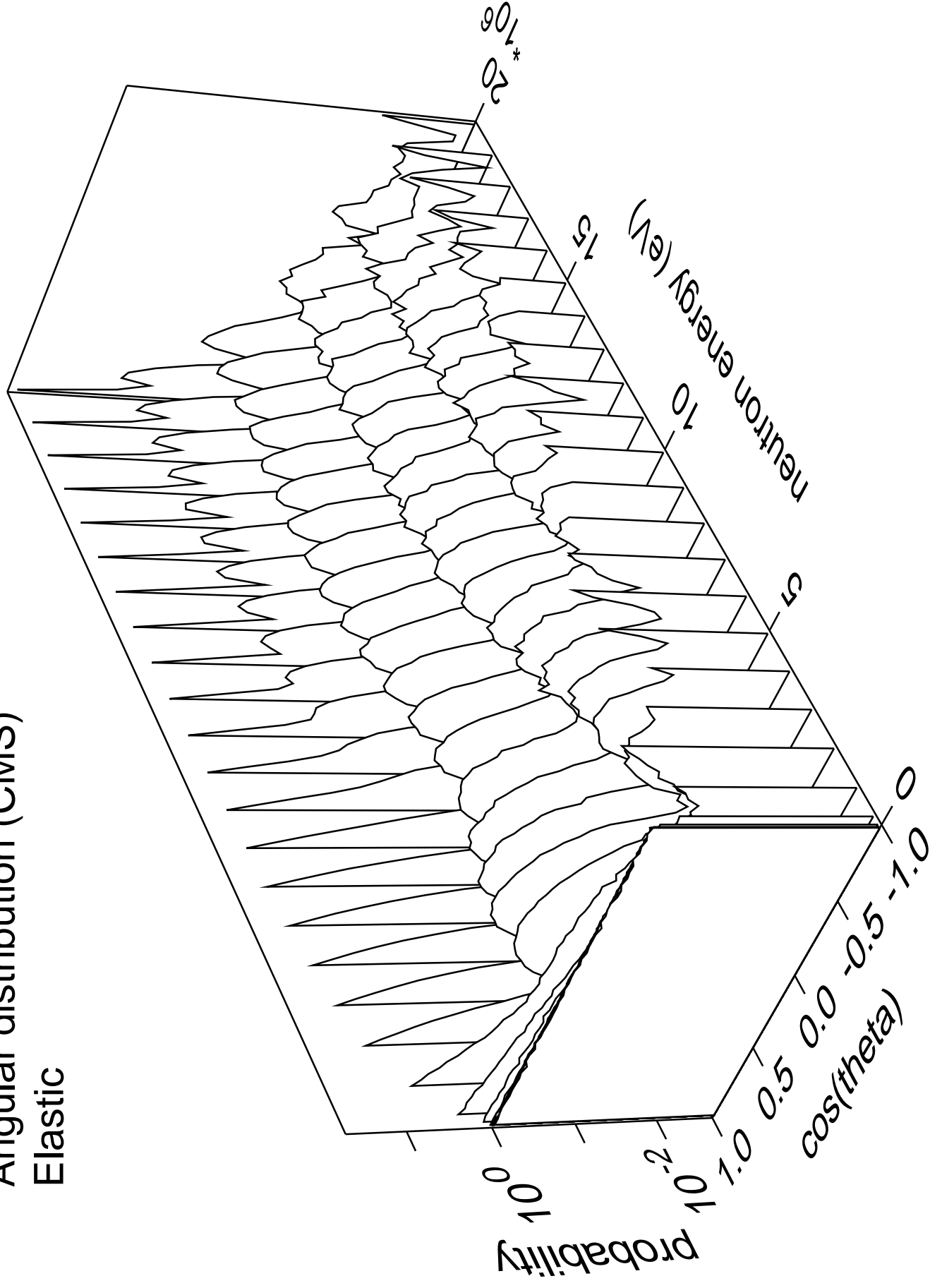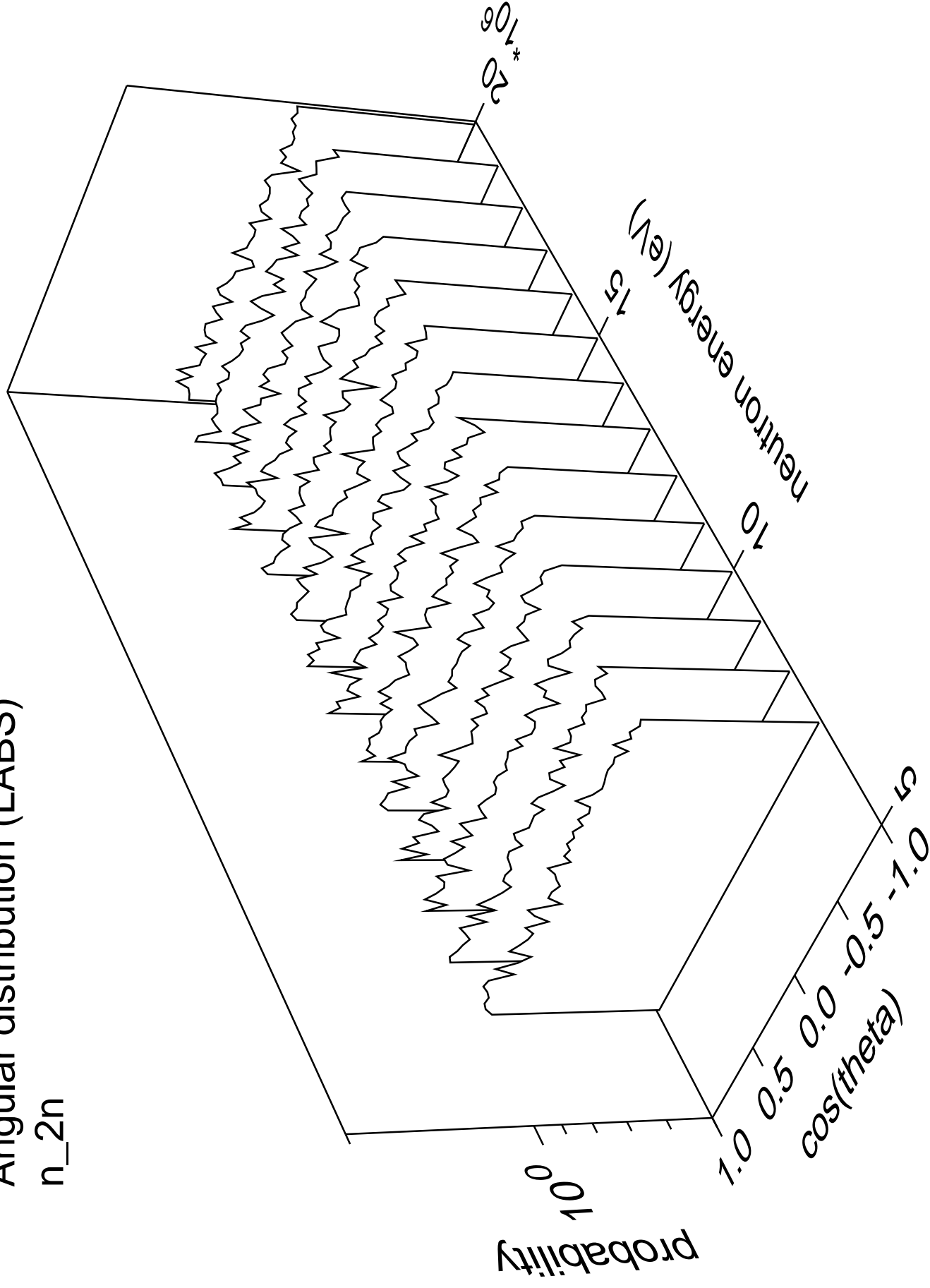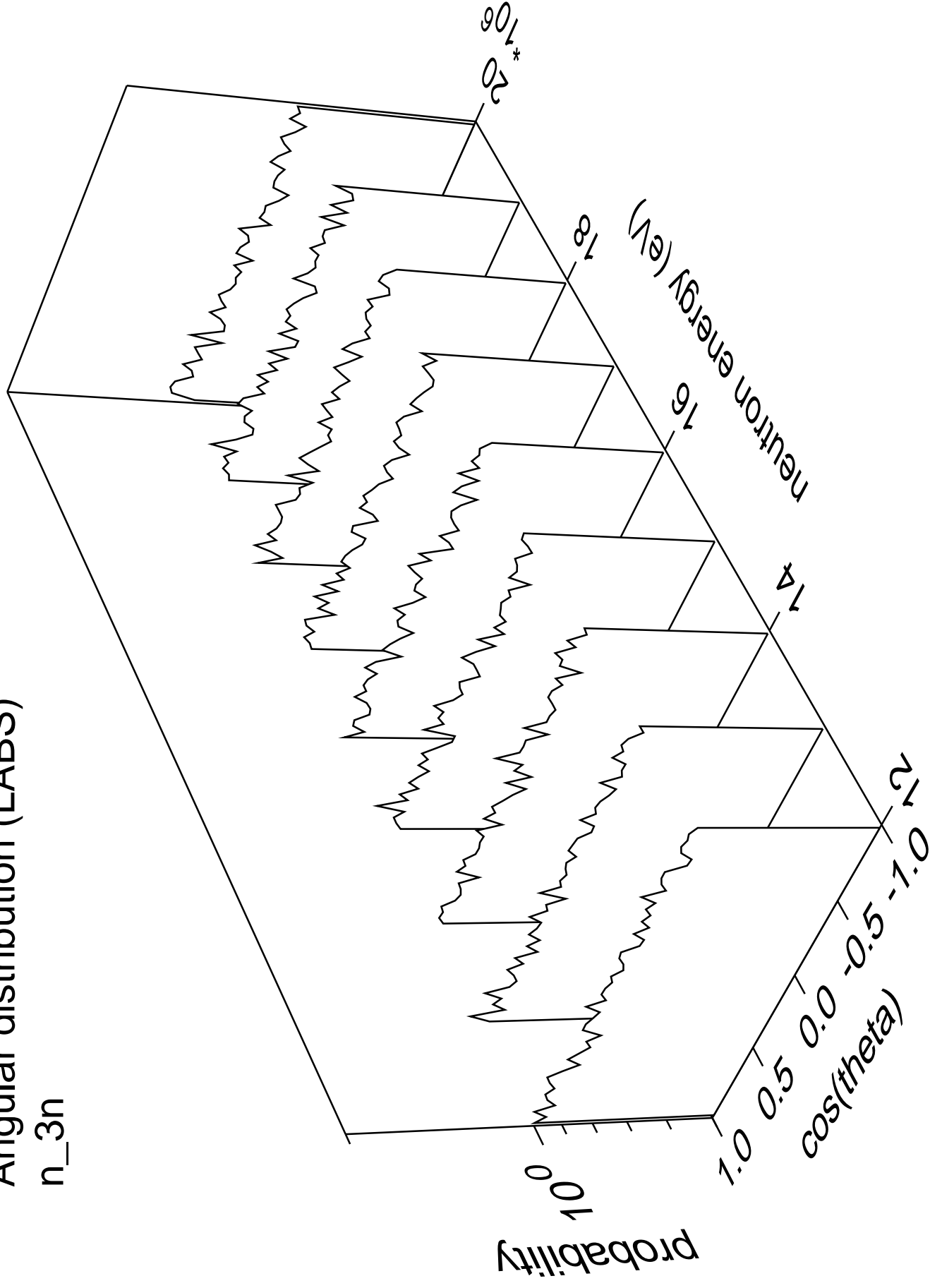
probability

cos(theta)

neutron energy (eV)

Angular distribution (LABS)
n_2n

probability

neutron energy (eV)

cos(theta)

1.0 0.5 0.0 -0.5 -1.0

5

10

15

20 *10⁶

Angular distribution (LABS)
n_3n

neutron energy (eV)

cos(theta)

probability

10^0

20 *10^6

18

16

14

2

1.0 0.5 0.0 -0.5 -1.0

Angular distribution (LABS)
n_4n

probability

10⁰

cos(theta)
1.0 0.5 0.0 -0.5 -1.0

neutron energy (eV)

19.0

19.5

20.0 *10⁶

Angular distribution (CMS)
n_n_1

neutron energy (eV)

cos(theta)

probability

Angular distribution (CMS)
n_n_2

cos(theta)

neutron energy (eV)

probability

Angular distribution (CMS)
n_n_3

probability

cos(theta)

neutron energy (eV)

Angular distribution (CMS)
n_n_4

probability

10⁰

cos(theta)

1.0 0.5 0.0 -0.5 -1.0

neutron energy (eV)

0 5 10 15 20 *10⁶

Angular distribution (CMS)
n_n_5

probability

10^0

cos(theta)

1.0 0.5 0.0 -0.5 -1.0

0

5

10

15

20

neutron energy (eV)

*10⁶

Angular distribution (CMS)
n_n_6

probability

cos(theta)

neutron energy (eV)

Angular distribution (CMS)
n_n_7

probability

cos(theta)

neutron energy (eV)

Angular distribution (CMS)
n_n_8

probability

cos(theta)

neutron energy (eV)

*10⁶
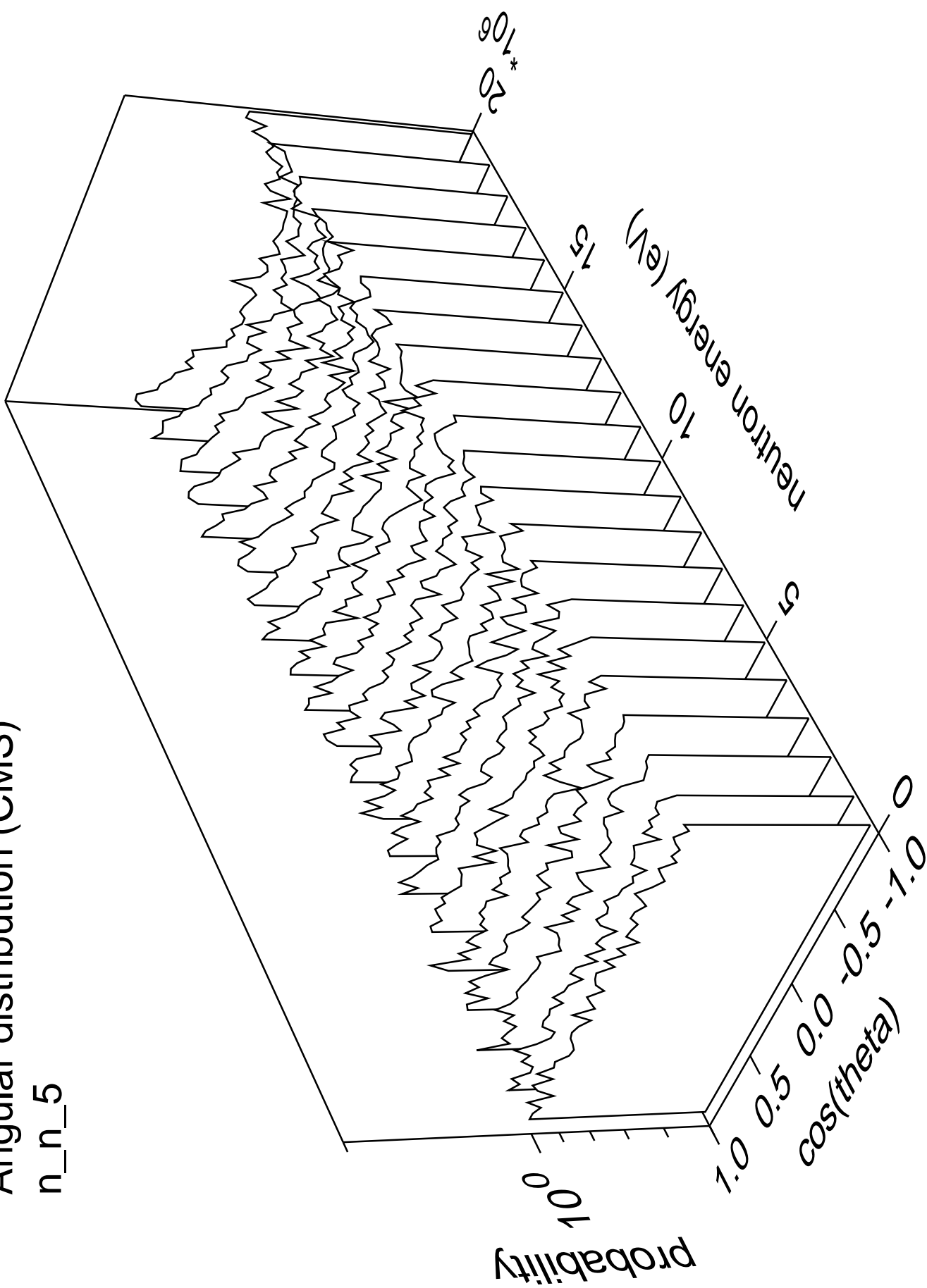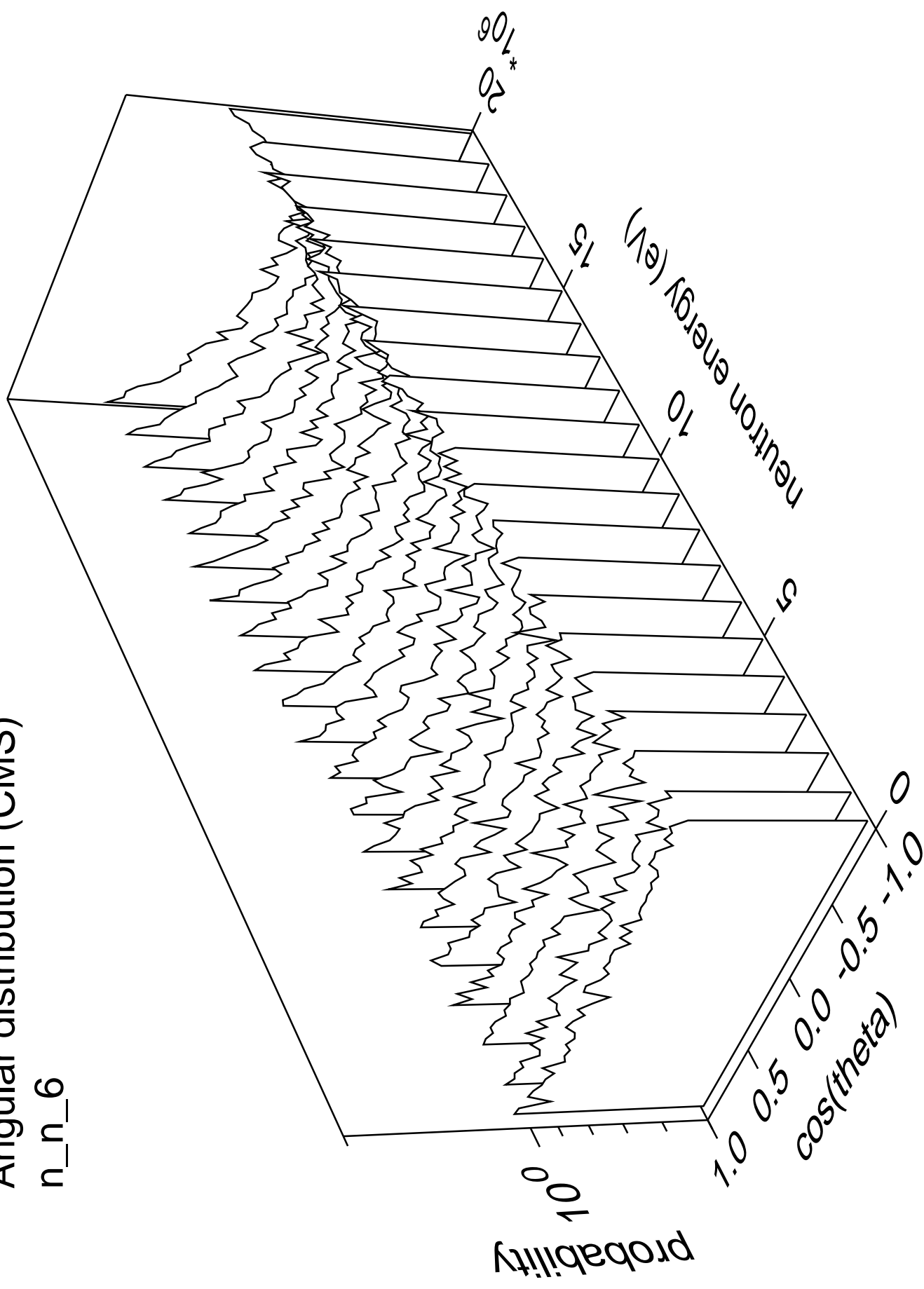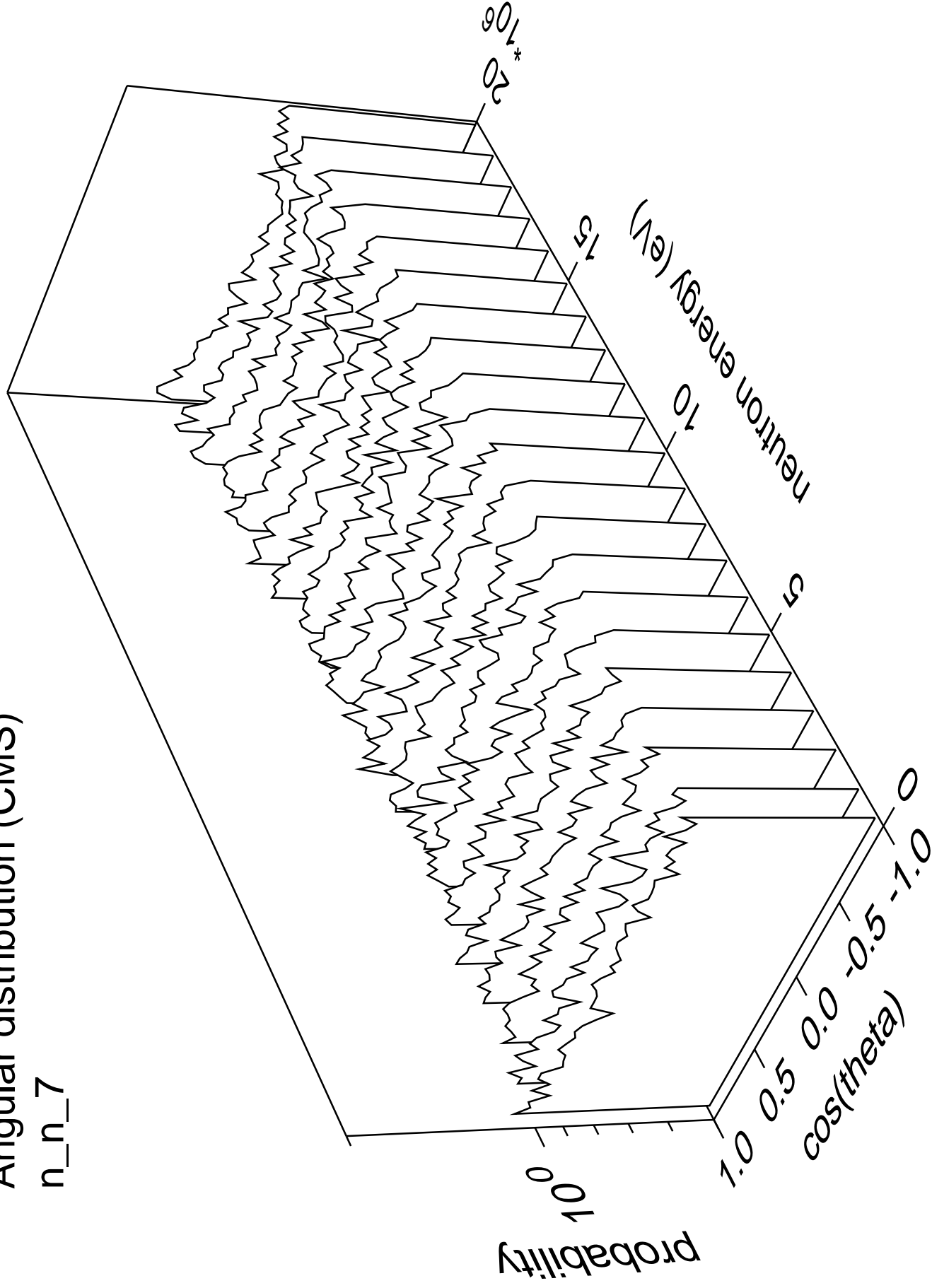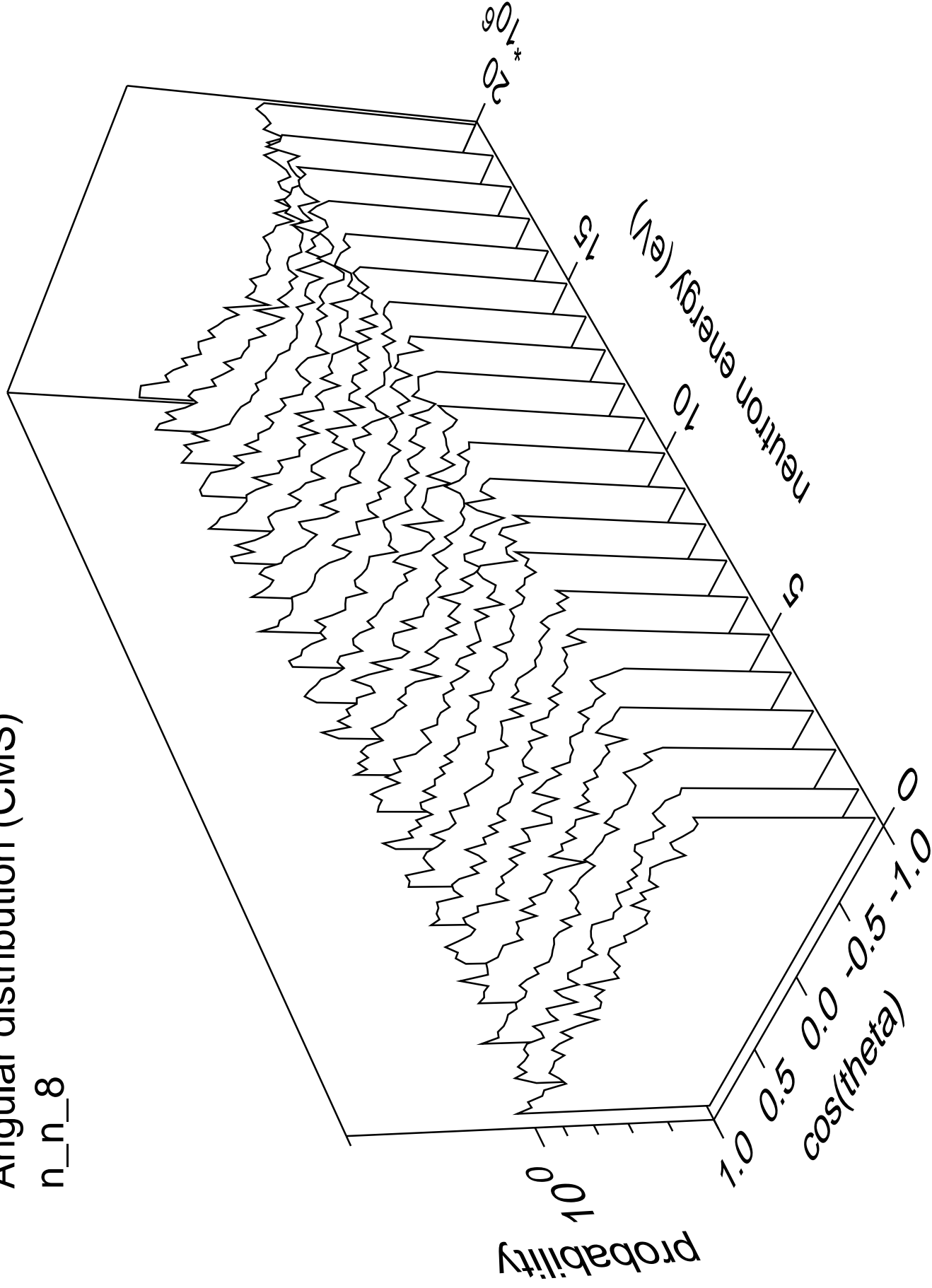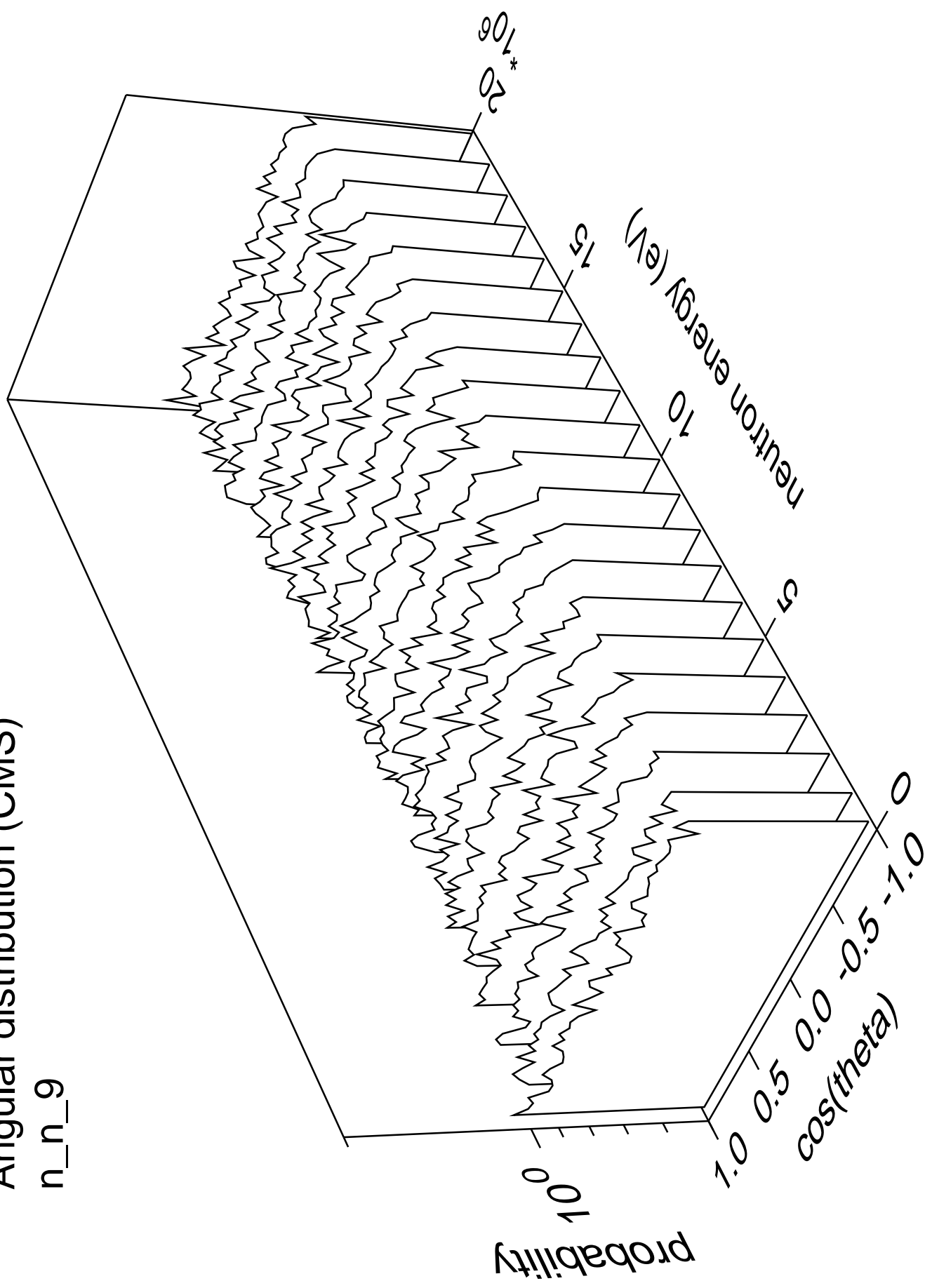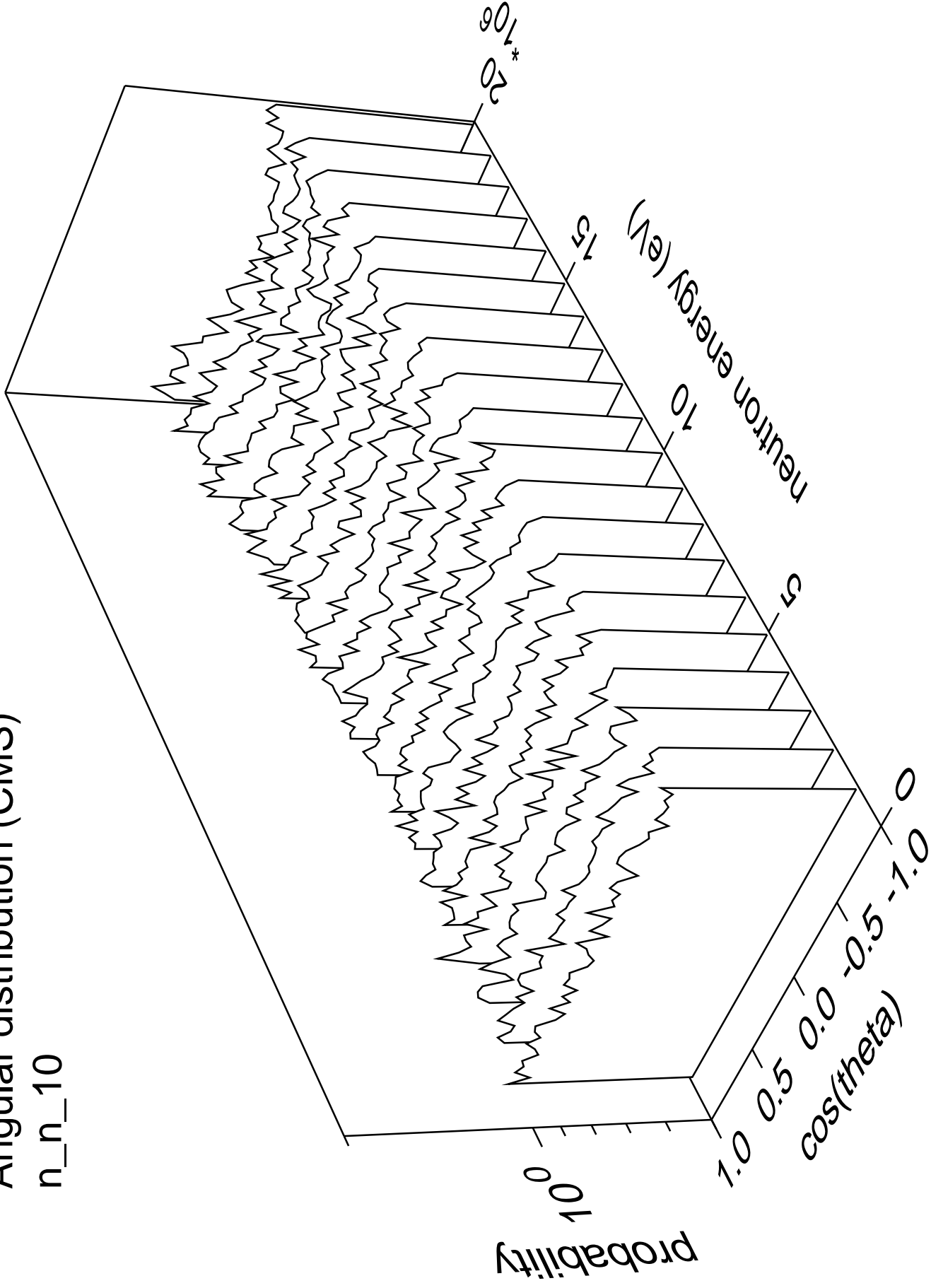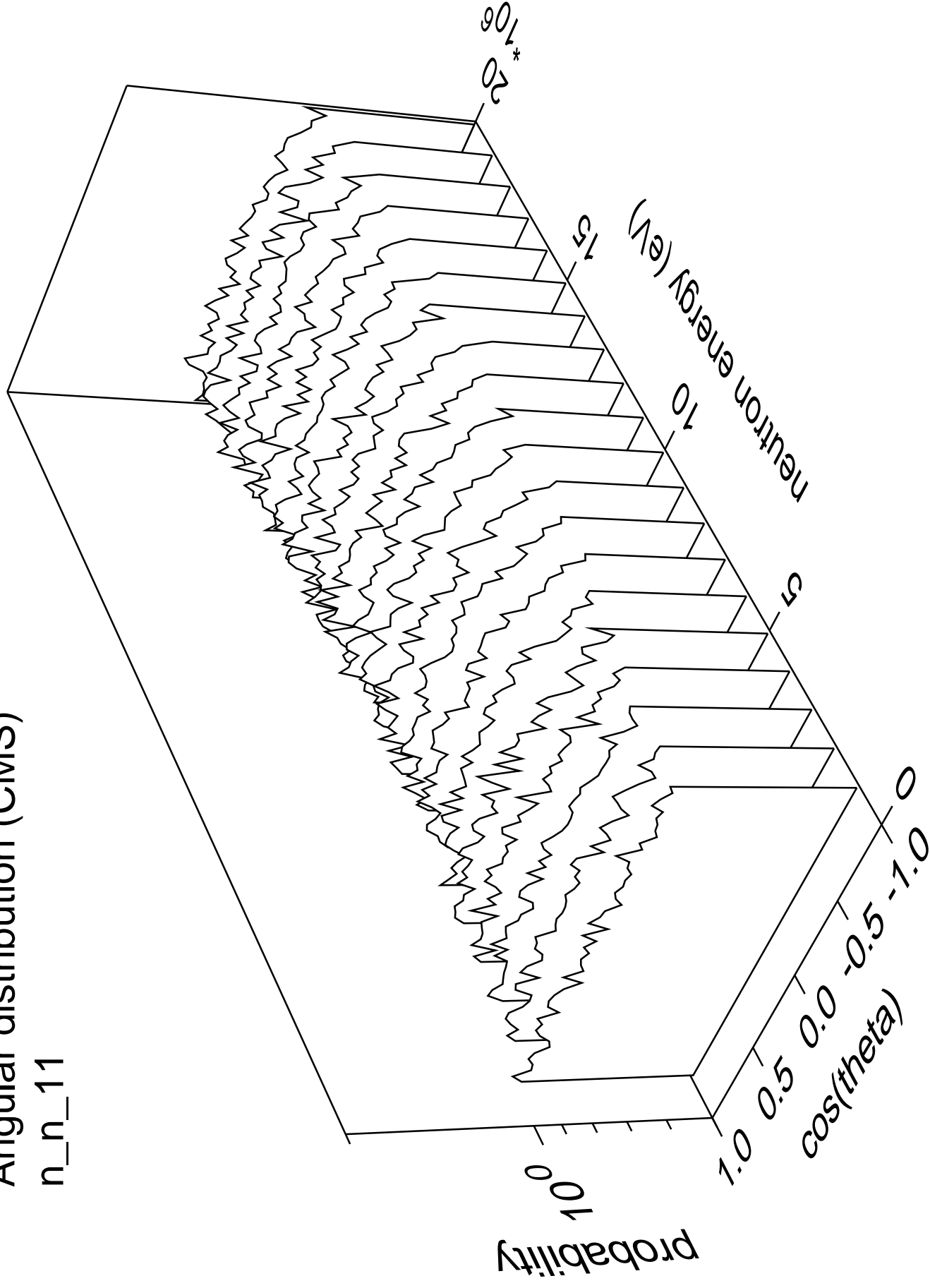
Angular distribution (CMS)
n_n_9

Angular distribution (CMS)
n_n_10

Angular distribution (CMS)
n_n_11
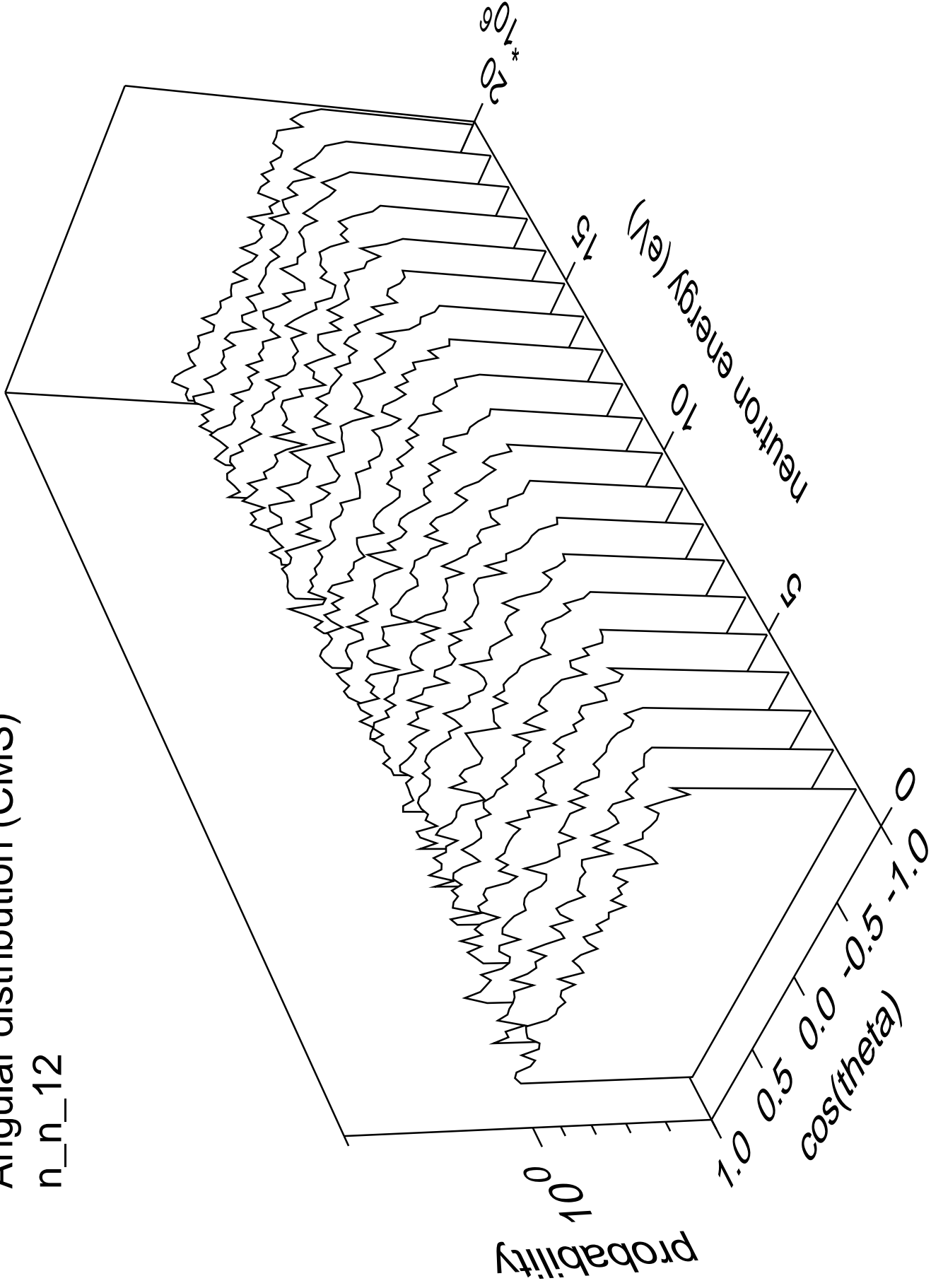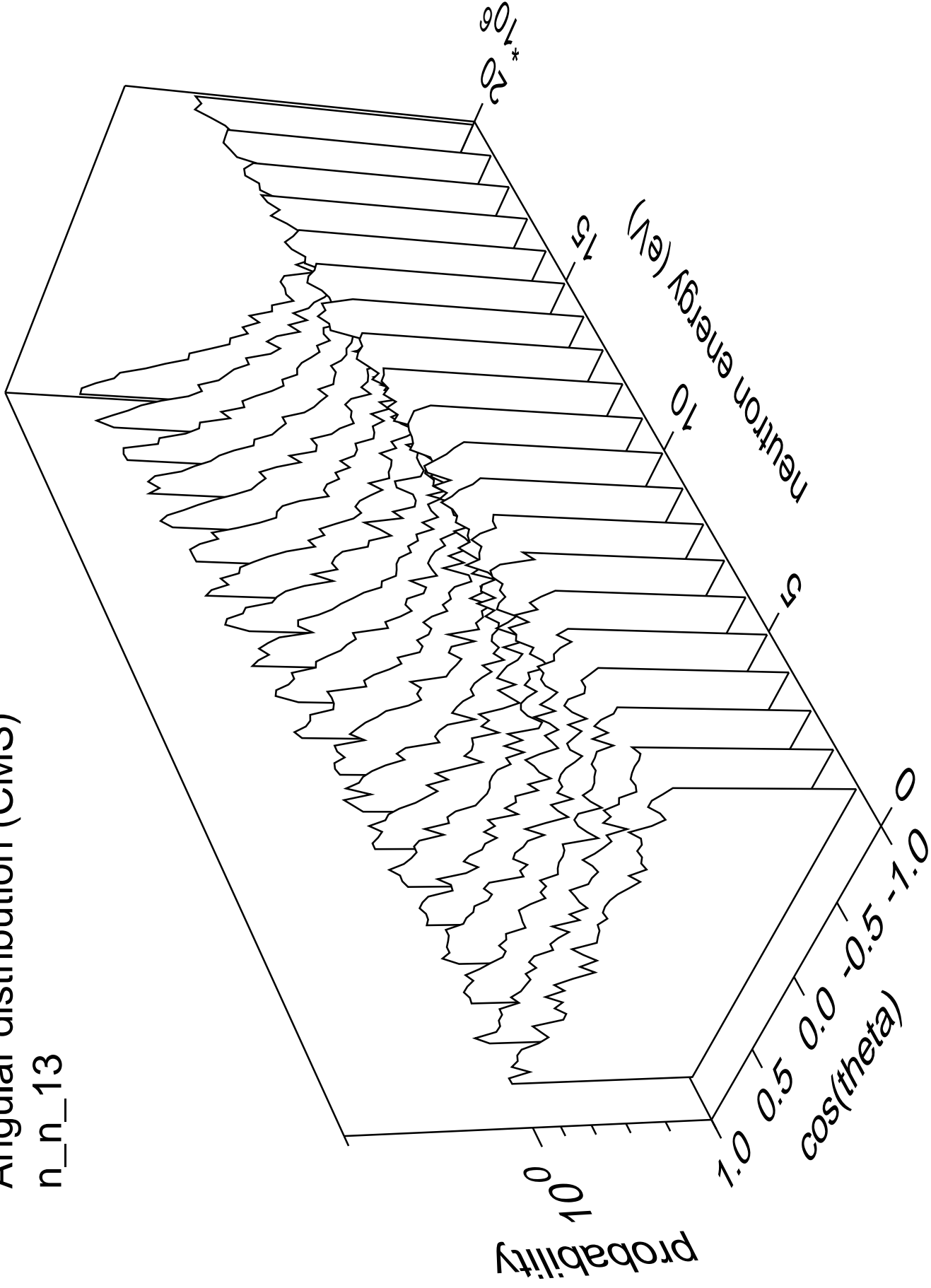
probability

cos(theta)

neutron energy (eV)

Angular distribution (CMS)
n_n_12

probability

neutron energy (eV)

cos(theta)

Angular distribution (CMS)
n_n_13

neutron energy (eV)

cos(theta)

probability

Angular distribution (CMS)

n_n_14

probability

neutron energy (eV)

cos(theta)

20 *10⁶

15

10

5

0

1.0 0.5 0.0 -0.5 -1.0

10⁰

Angular distribution (CMS)
n_n_15

probability

neutron energy (eV)

cos(theta)

Angular distribution (CMS)
n_n_16

probability

cos(theta)

neutron energy (eV)

*10⁶

Angular distribution (CMS)
n_n_17

probability

neutron energy (eV)

cos(theta)

20 *10⁶

15

10

5

0

1.0 0.5 0.0 -0.5 -1.0

10⁰

Angular distribution (CMS)
n_n_18

probability

neutron energy (eV)

cos(theta)

Angular distribution (LABS)
n_n_cont

neutron energy (eV)

cos(theta)

probability
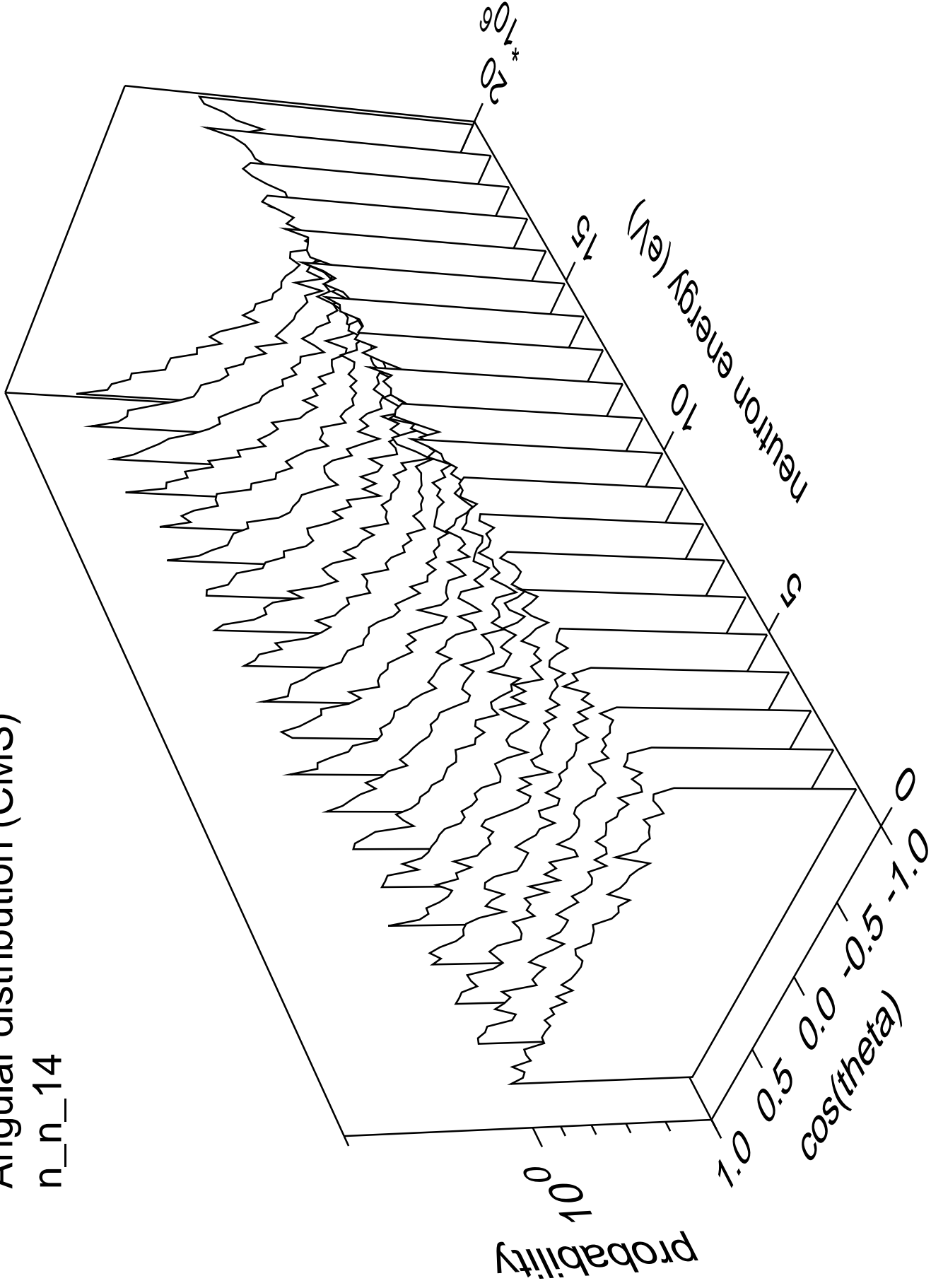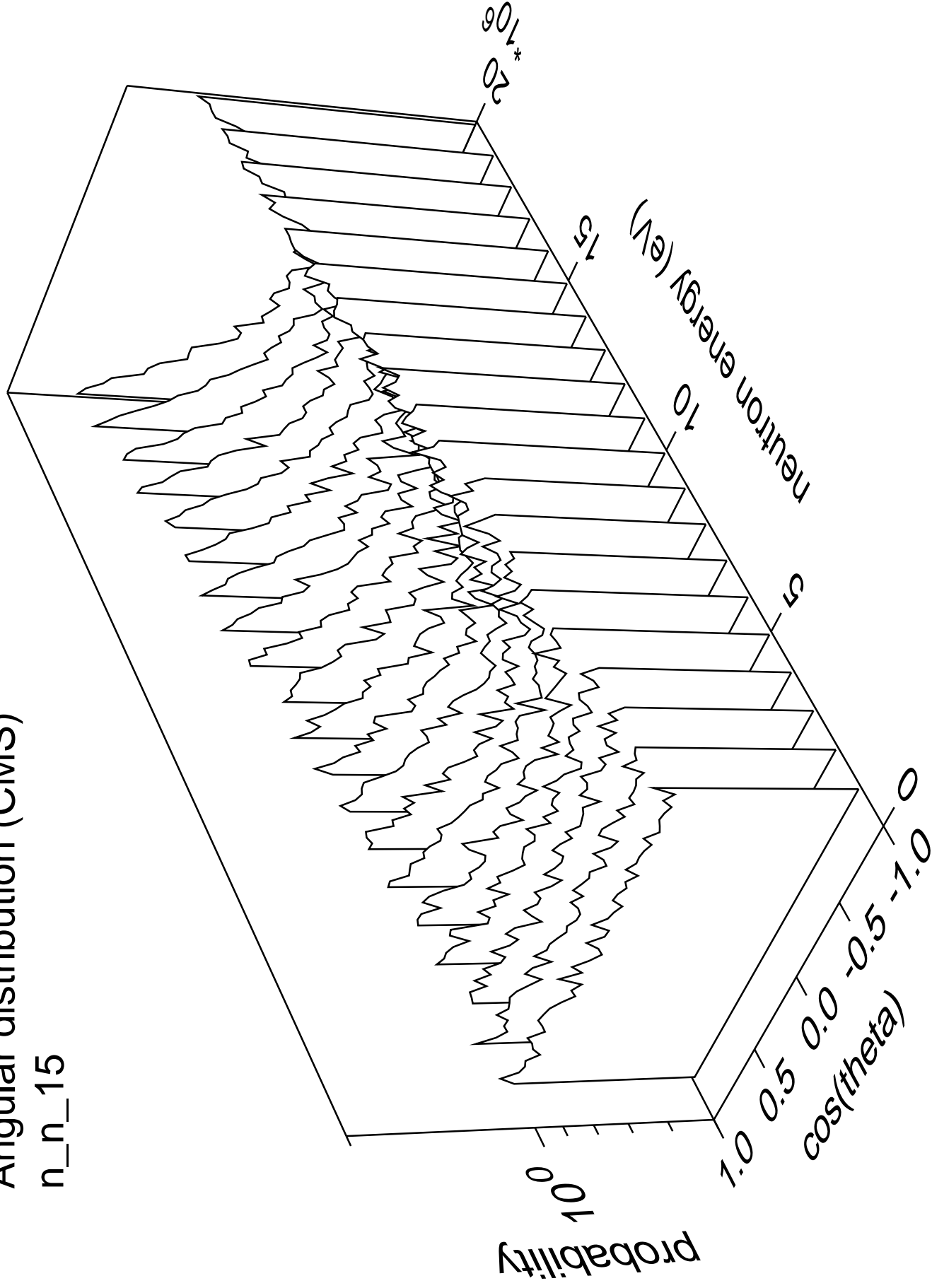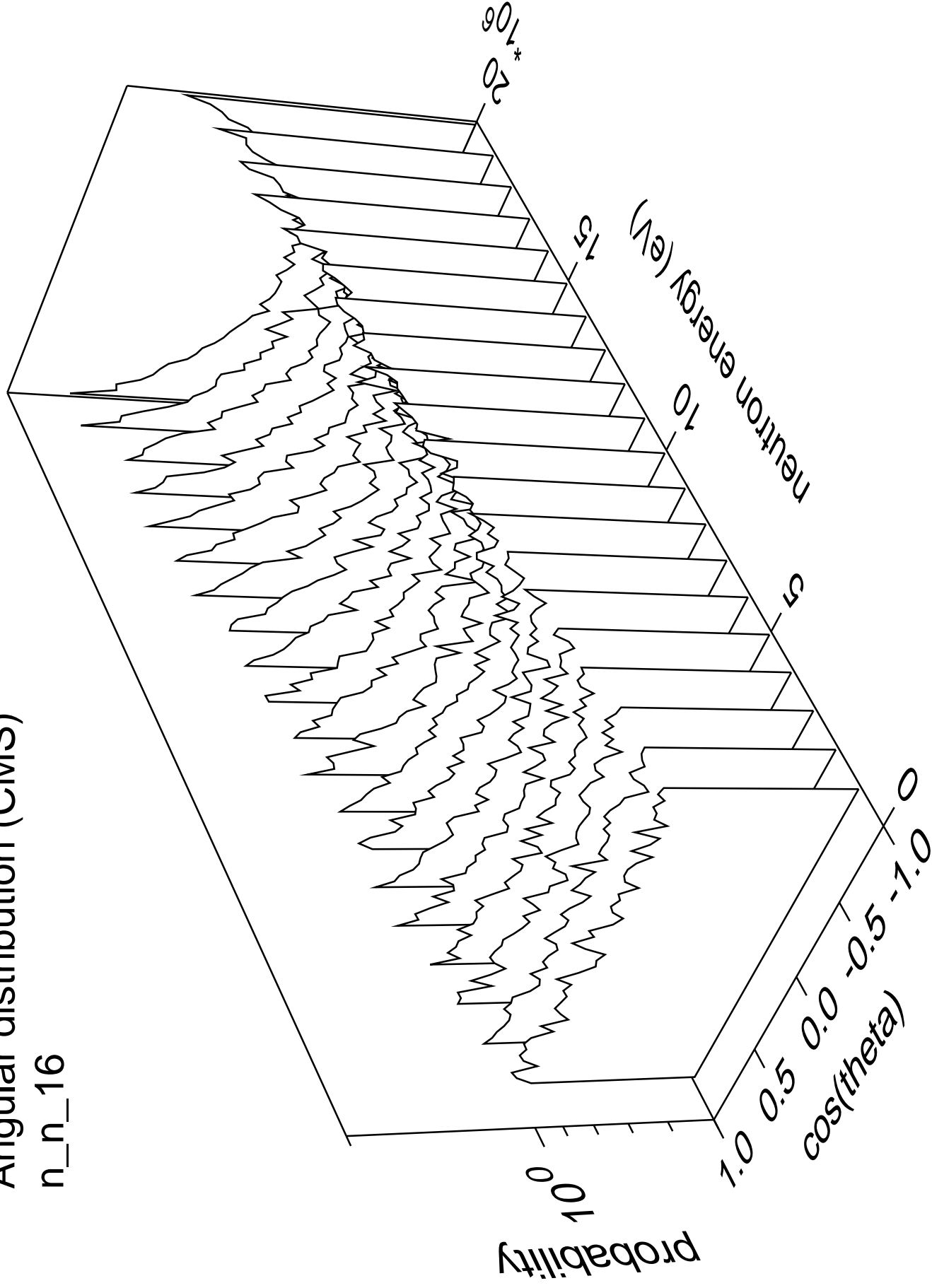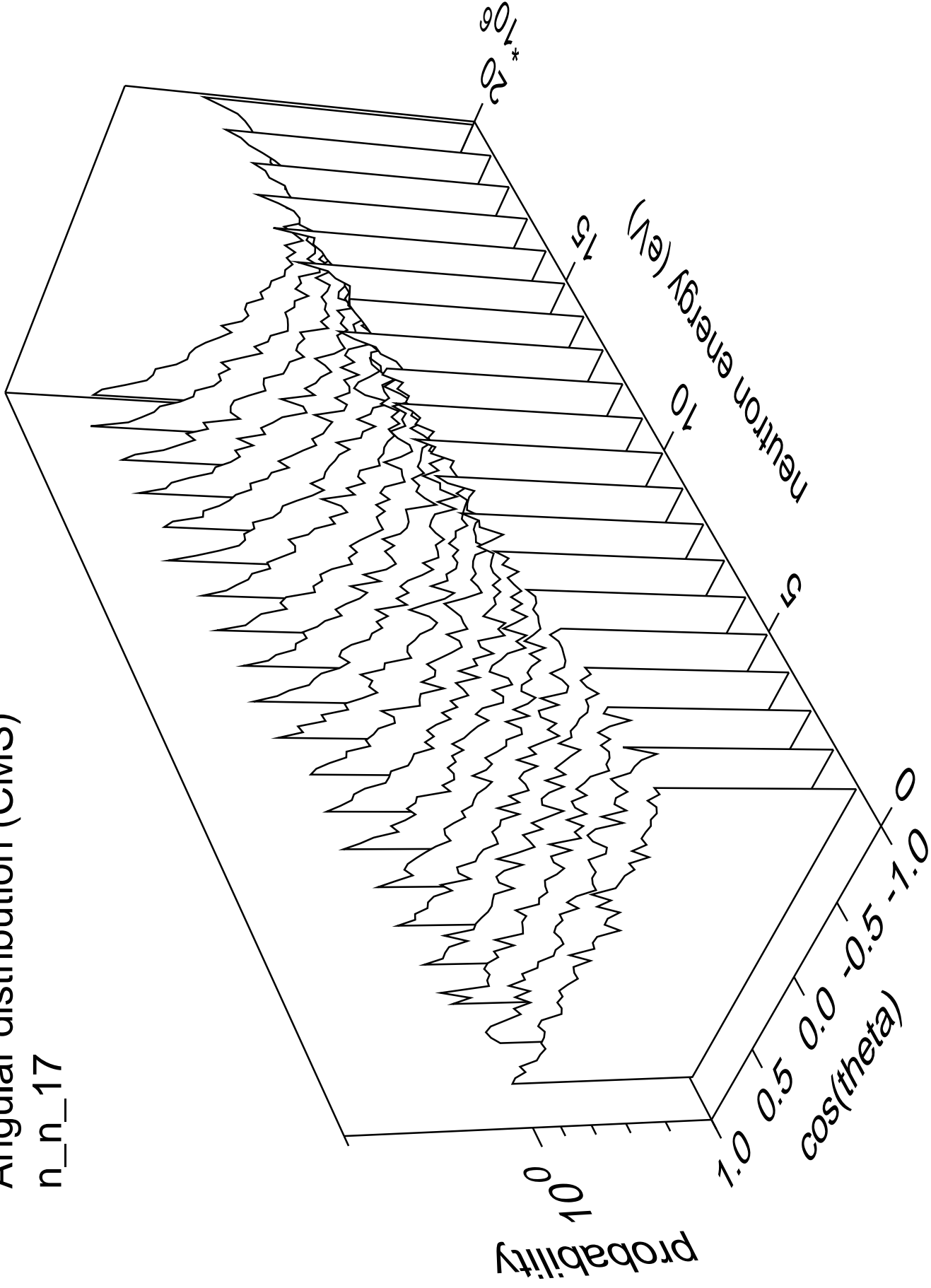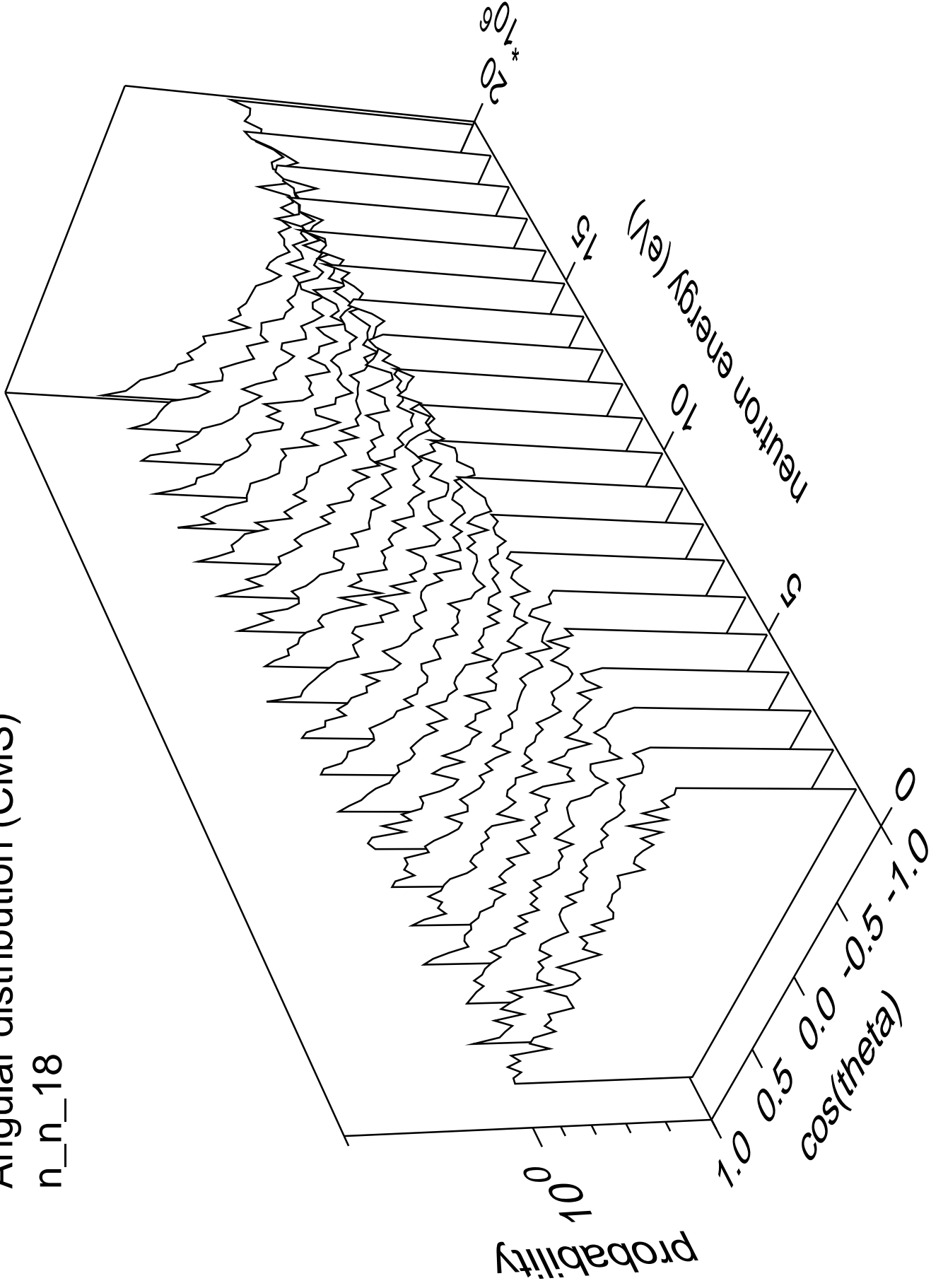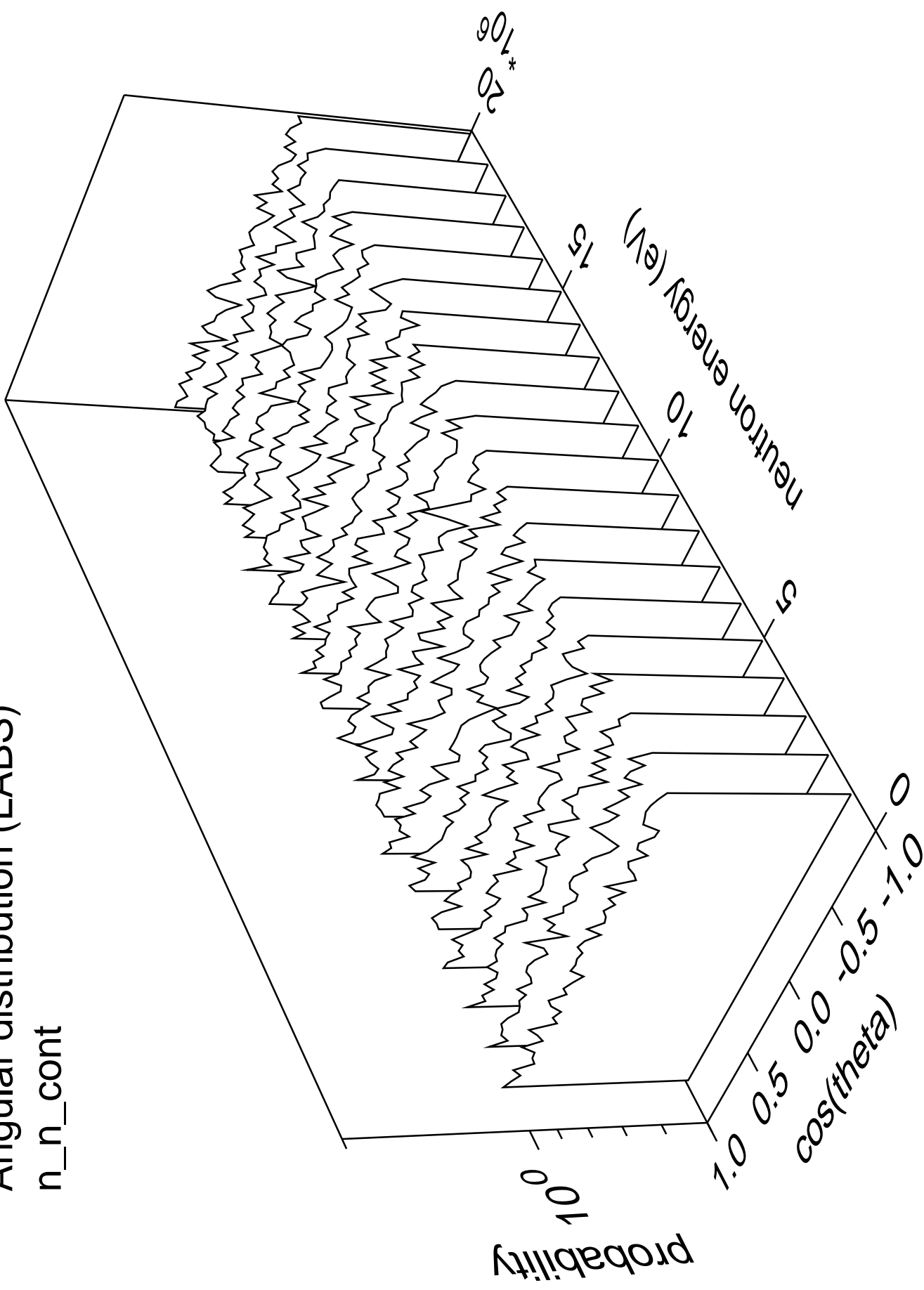
Angular distribution (LABS)
Fission
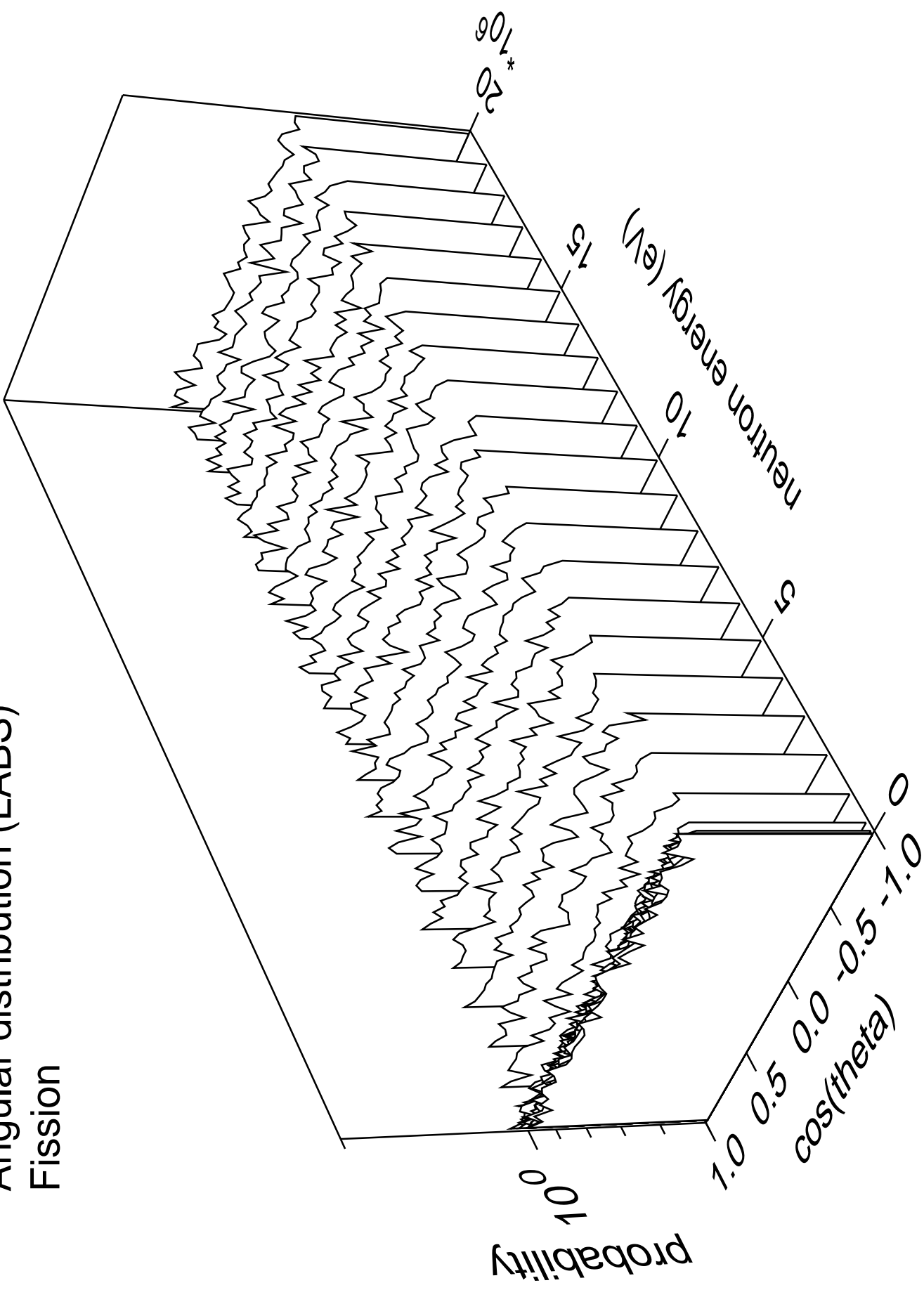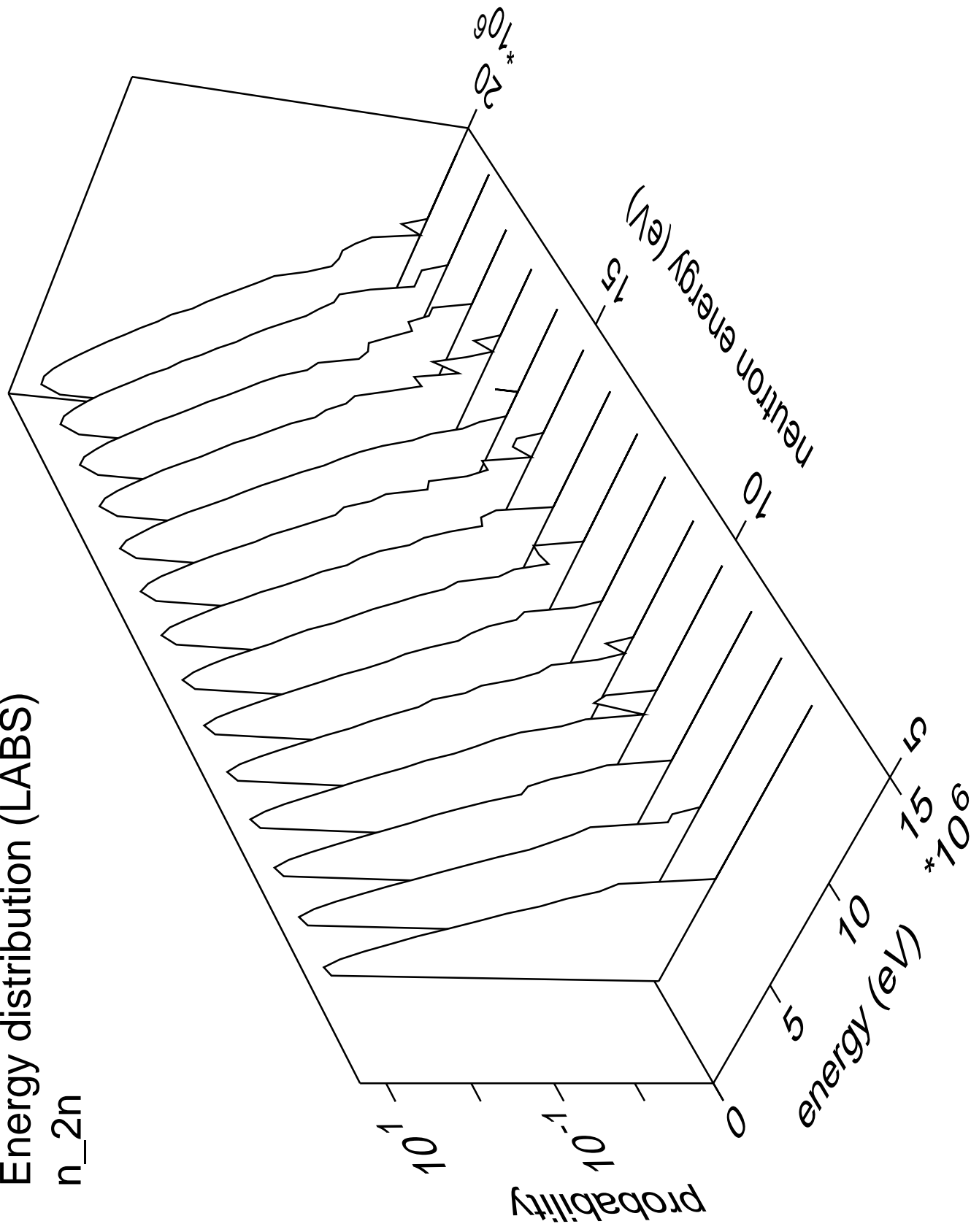
probability

neutron energy (eV)

cos(theta)

Energy distribution (LABS)
n_2n

probability

10^1

10^{-1}

energy (eV)

0

5

10

15 *10⁶

neutron energy (eV)

5

10

15

20 *10⁶

Energy distribution (LABS)
n_3n

probability

energy (eV)

neutron energy (eV)

10^1

10^{-1}

0

5

10

15   $*10^6$

7

14

16

18   $*10^6$

20   $*10^6$

Energy distribution (LABS)
n_4n

probability

10^1

10^-1

energy (eV)

0

5

10

15   *10^6

19.0

19.5

20.0   *10^6

neutron energy (eV)

Energy distribution (LABS)
n_n_cont

probability

energy (eV)

neutron energy (eV)
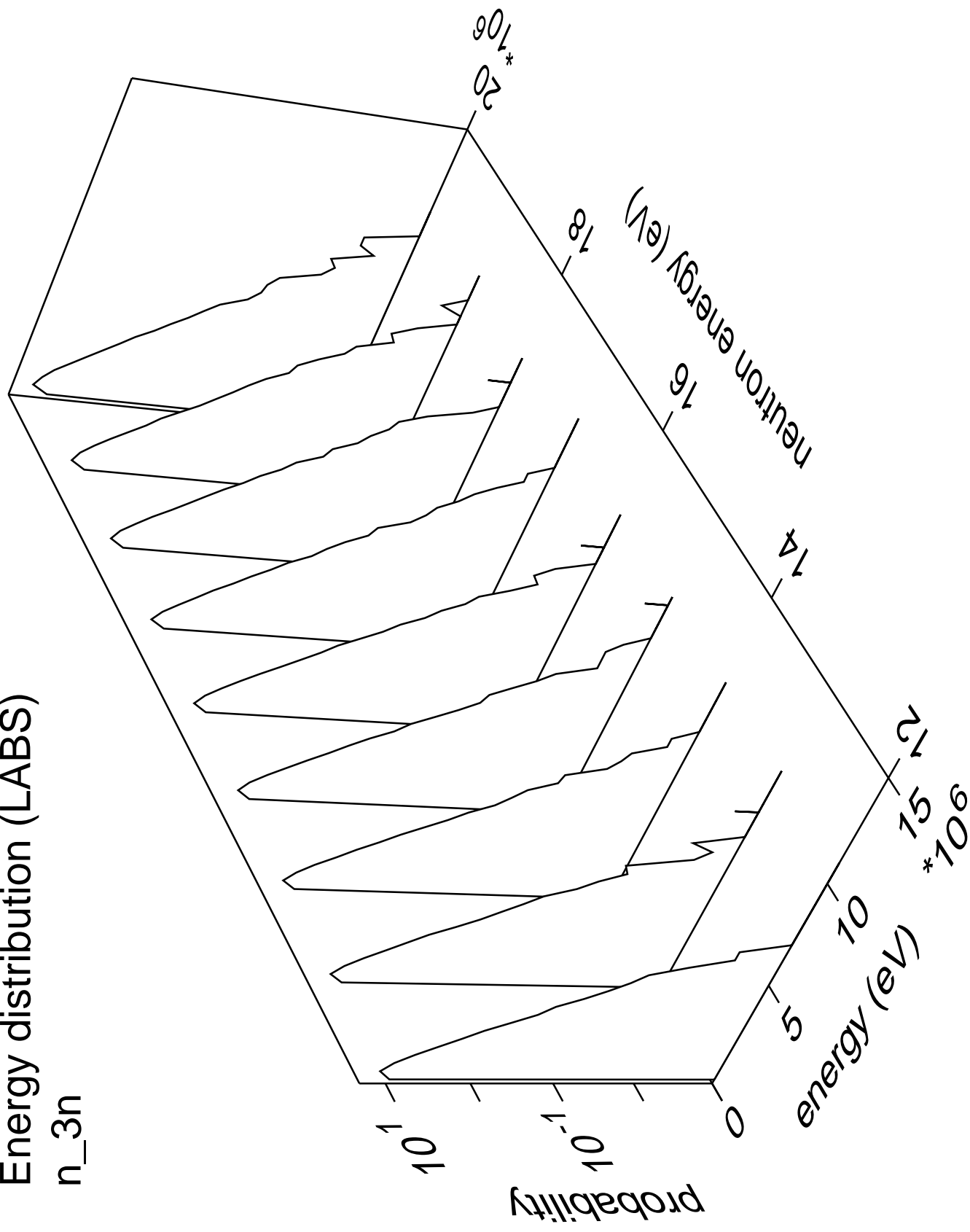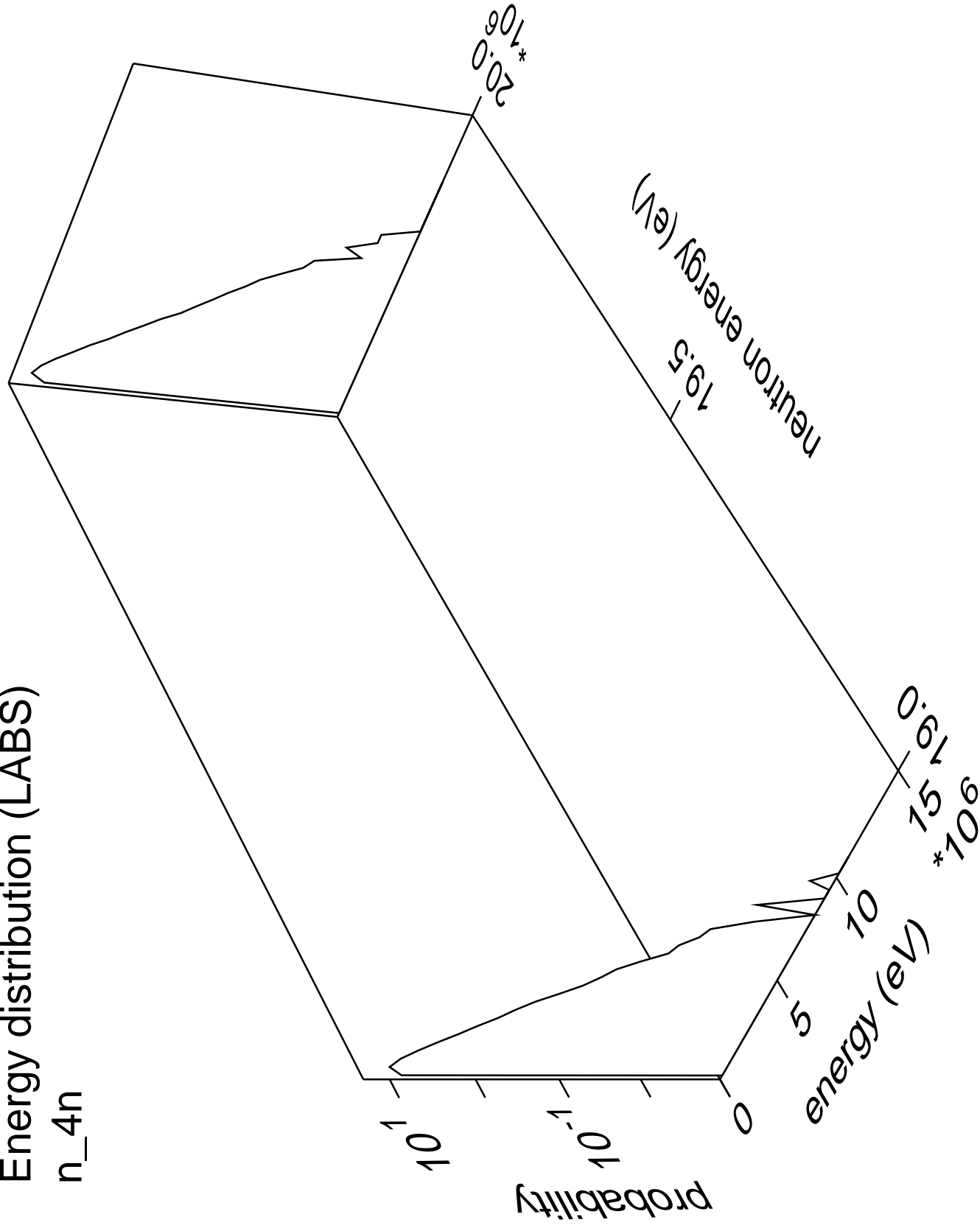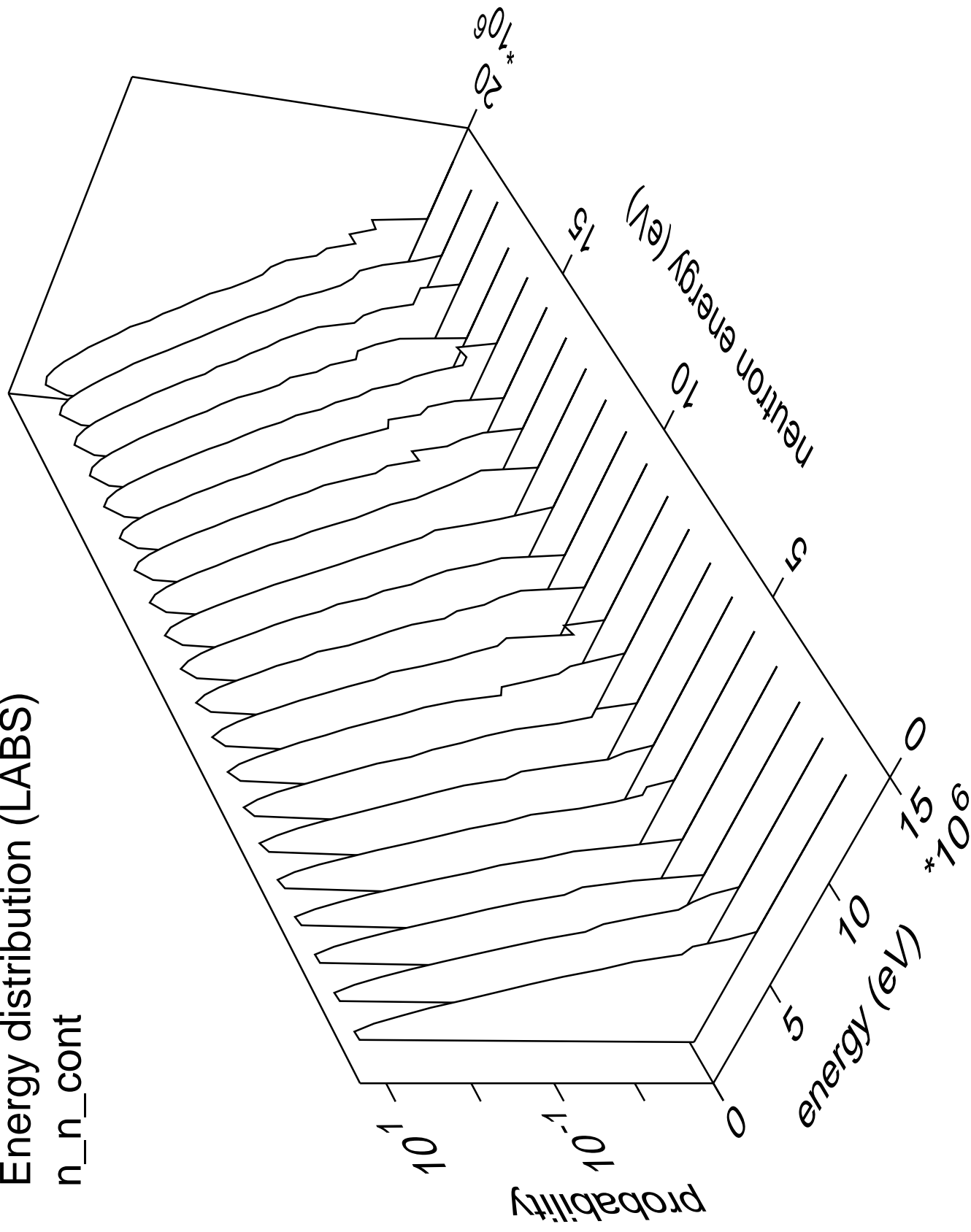
Energy distribution (CMS)
Fission prompt

probability

energy (eV)

neutron energy (eV)

10^1

10^{-1}

0   5   10   15   20   *10^6

0   5   10   15   20

*10^6